

# BUSINESS EDUCATION WORLD

February, 1956



How  
to Teach  
Transcription

PAGE 11

A Public  
Relations  
Program

PAGE 14

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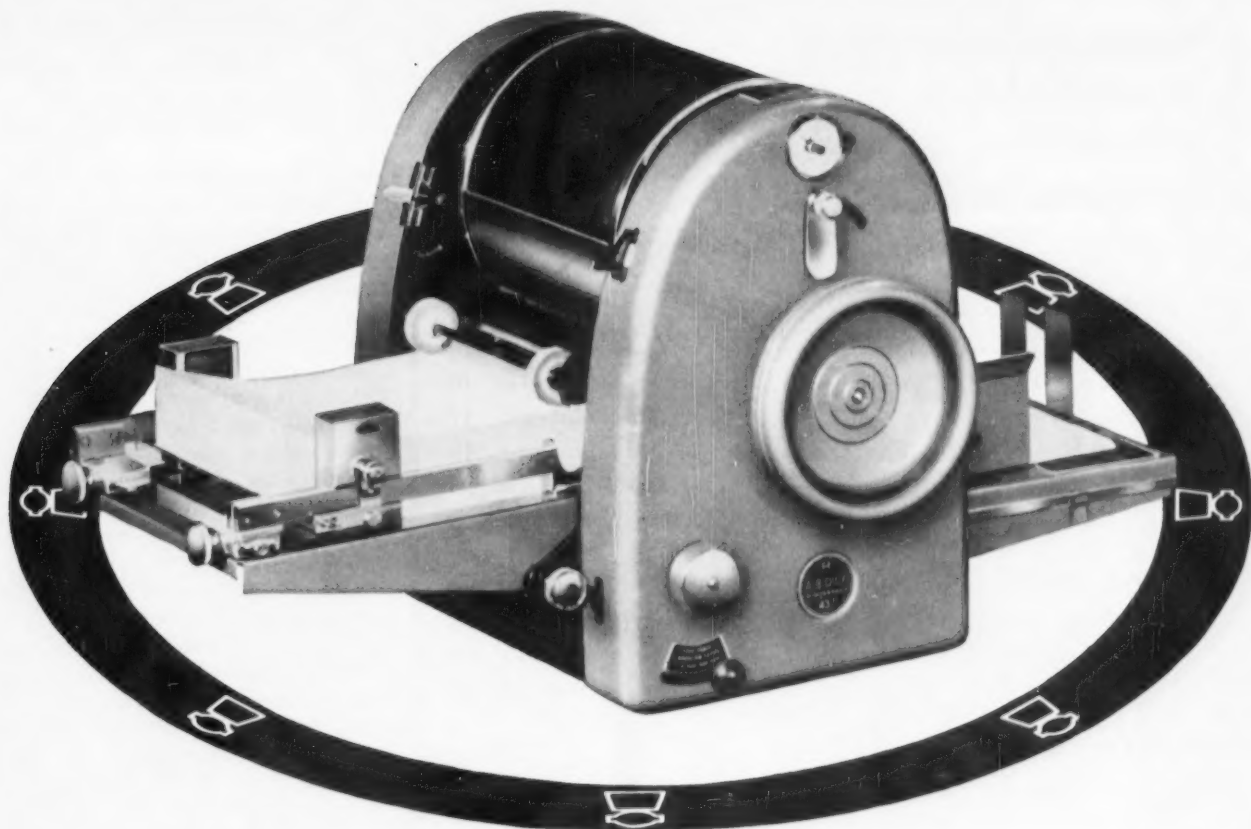
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# BUSINESS EDUCATION WORLD

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## YOUR READING SPEED

IF YOU'RE like most teachers, you have a class schedule that is a fairly heavy load in itself. Add to it faculty meetings, responsibility for extracurricular activities, preparation of lesson plans, correction of papers; add to all that the normal demands of family and friends, television, radio, and movies, and time begins to run out.

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Several months ago, the Associated Business Publications, an organization of which BUSINESS EDUCATION WORLD is a member, commissioned Dr. Nila B. Smith, head of the Reading Institute at New York University, to prepare a short course that would show, step-by-step and in detail, specific ways to increase reading speed and comprehension. Although many reading "clinics" employ fairly elaborate mechanical means, the method that Dr. Smith presents requires no equipment except a pencil.

This series (which, incidentally, will later be published in book form by Prentice-Hall), was designed for use by businessmen, because most of the members of the Associated Business Publications are business magazines. However, the human eye does not normally vary from occupation to occupation; what enables a businessman to read faster and better should enable an educator to read faster and better. Therefore, beginning next month, we shall present several installments of Dr. Smith's material.

A project like this is, of course, a departure from BUSINESS EDUCATION WORLD's usual policy. Aside from the fact that we ourselves have a stake in your ability to read faster (if you now skim through BEW, we hope you'll soon be able to read more of it), we believe we can make a real cultural and practical contribution to your own education.

This series, by the way, will not appear in any other business education publication.—Editor

BUSINESS EDUCATION WORLD



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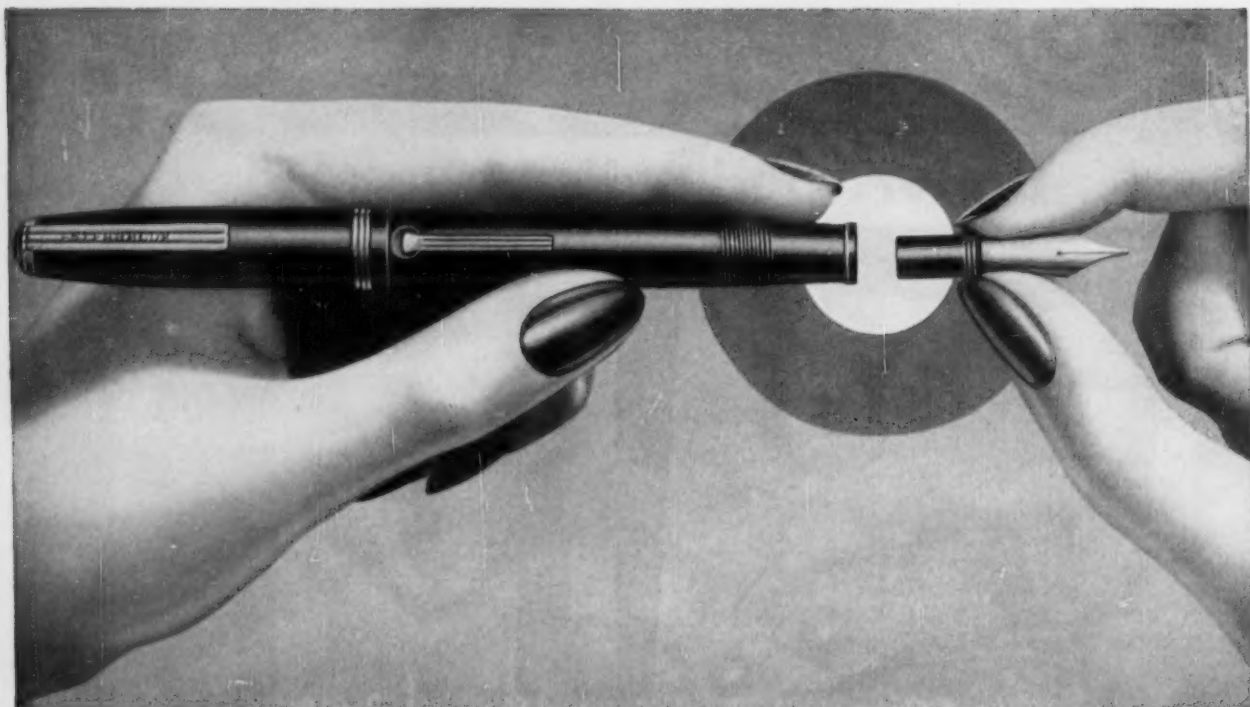
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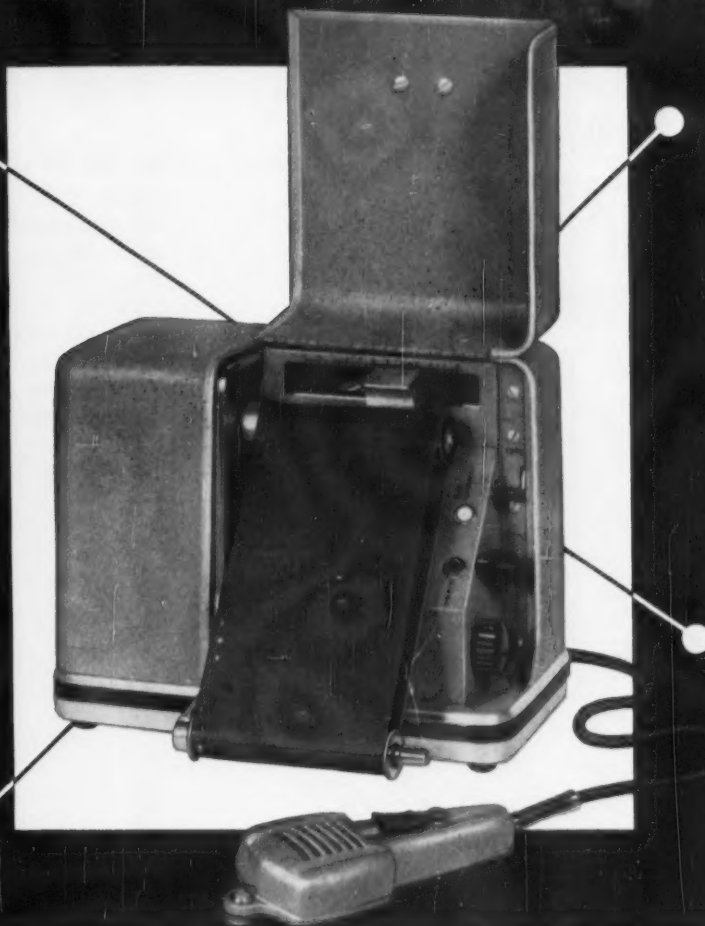
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# Business Scene

## Bull Running Out of Steam

As 1955 ended, Wall Streeters re-examined some of the ground covered in the last 12 months and wondered if the best days of the 1949-55 bull market weren't in the dim past. The market slowed down measurably in 1955, even though it is currently resting only about 1 per cent below the September 23 high (for Standard and Poor's 50 industrials).

For the year as a whole, the bull market advanced about 28.5 per cent for industrials, 11.9 per cent for rails, and 6.5 per cent for utilities. This isn't bad—in fact, few years have been better—but it doesn't compare with 1954. Then, the industrial index boomed up 49.6 per cent, and rails moved up an equal amount. Even utilities, normally trailing, gained 18.8 per cent that year, three times the gain in 1955.

Of course, if the market had soared in 1955 as it did in 1954, analysts, economists, and politicians would be worried about inflation. Now, however, they will be surprised if 1956 brings as big a market rise as even 1955 did. Most Wall Streeters look for a gradual settling down of prices, especially in the latter half of the year.

## What's Up, Doc?

Here are a few interesting predictions for 1956. Any complaints you have should be addressed to Dexter M. Keezer, of the Department of Economics, McGraw-Hill Publishing Company, New York City. He boasts that they are unpremeditated, sometimes uninformed, and always unequivocal.

- The only big result of the Geneva conference was the Russian acceptance of the fact that we would never start a preventive war. Therefore, the Soviets will do everything they can think of to stir up trouble for us, just short of starting a big war.

- It will become increasingly evident that it will soon be possible to buy atomic bombs at a bargain counter price, which almost any two-bit dictator will be able to afford. With no effective defense against atomic bombardment, the international scene will become even more jittery.

- Sometime before the end of the

year, however, or perhaps early in 1957, a successful beginning will be made to provide some immunity against atomic bombardment.

- No one will win the national election. It will be so close that the country will end up virtually dead center. One party will be in charge of the executive branch and the other in charge of a key part of the legislative branch. The result will be that key decisions will be made in conformity with the great mass of the people with middle-of-the-road ideas.

- And, finally, Eisenhower will not run in '56.

## Deep in the Heart of Taxes

The tax cut will become more involved on the political gridiron in 1956. Some Democratic leaders, including Speaker Sam Rayburn, are inclined to let the issue rest until spring, when the receipts-spending picture will come into better focus. The Administration position is to defer a tax cut decision for a few more months. Not only will it have a better budget picture then, but it will have a better feel of the future business trend. If the trend is down, a cut will be backed.

The Democrats have a plan for an individual income-tax cut, regardless of the budget and business outlooks. If you saw Rayburn's recent comments on removing tax inequities, it's hard to escape the conclusion that he will plunk for an individual cut, then make up the loss by higher taxes on business.

## End of a Boom

The once-torrid uranium stock boom, centered around Salt Lake City, Utah, is currently about as hot as a warm iceberg. Where six months ago, new companies were sprouting every day, financed largely by "penny stock" offerings, today it is almost impossible to start an equity-financed company.

Brokerage houses in Salt Lake City are also finding it tough to make a living; many are closing up shop. Many large units are absorbing the assets of properties that look promising, but haven't been able to go into full-scale production.

(Continued on page 8)



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## BUSINESS SCENE

(Continued from page 6)

The merger wave points up a significant shift in the uranium picture. Bigger companies are faring well, and their shares are selling higher than they did before the September nose-dive. Observers feel that the shakeout has run its course, that the companies left in the uranium picture will be the healthiest ones, and that the fly-by-night operations have had their heyday.

### Don't Spare the Spare

Detroit is trying to find a way to remove the spare tire from your 1958 model. The longer, lower look in cars, with shrinking trunk space that leaves no room for spares, is dictating the change. But there are road blocks.

One auto maker asked Goodyear to develop the idea of equipping future cars with four puncture-proof tires. Goodyear is working on the proposal, but is dubious about its merits. For one thing, the rubber company insists that there is no such thing as a puncture-proof tire, only puncture-resistant tires, such as its tubeless tire with blowout shield. Also, Goodyear feels that the public, accustomed to the spare, will demand a fifth tire, which the company wants to continue selling to car manufacturers.

### TV is Better Than Ever

The biggest batch of Hollywood films ever released to television was sold last month by RKO Radio Pictures, Inc. The company sold its entire library of 740 feature-length films for \$15,200,000.

The films include "Citizen Kane," "The Hunchback of Notre Dame," "Gungha Din," and eight Astaire-Rogers musicals. No films will reach TV, however, until they have been exhibited in theatres for three years.

RKO made the sale in order to put more money into films being made for both theatres and television.

### Stay Out of Court

Motorists can now pay their parking tickets on the sidewalk instead of in the courtroom. The violation tag, printed on a special form, is inserted in a new fine-collecting device that somewhat resembles a parking meter. The fine is deposited in silver through a slot. To obtain a receipt, the user must crank and release a lever. Larger fines may be handled, but all in silver, of course.

# 115

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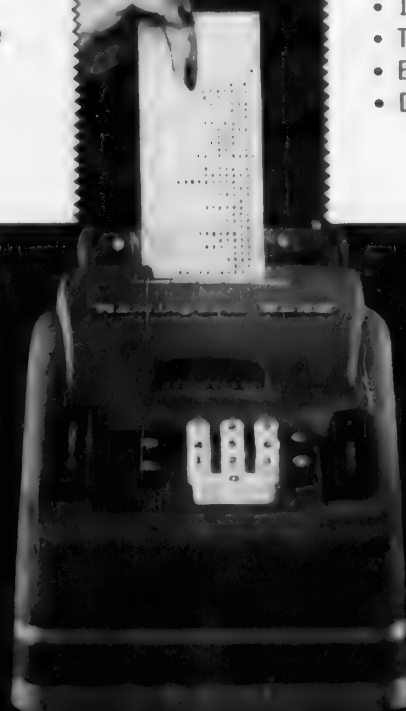


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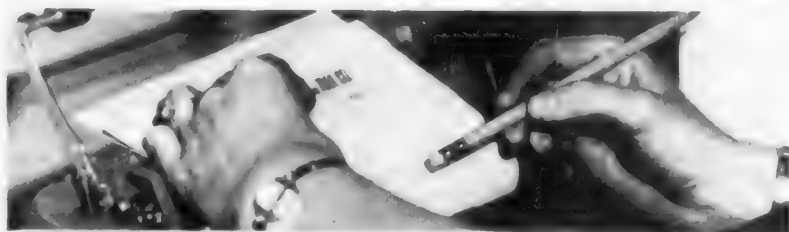




## HOW TO TEACH



## TRANSCRIPTION



# 1. What, When, How—a Survey

**GEORGE A. WAGONER**, University of Tennessee, Knoxville

### WHAT IS TRANSCRIPTION?

**I**N THIS SERIES of four articles, transcription is considered as having two meanings: (1) typing into straight-copy form notes taken at an even rate of dictation, and (2) typing into correct form, sometimes with carbon copies and envelopes, letters or memoranda from shorthand notes taken at a speed below the students' maximum rates. These two types of transcription are referred to as (1) transcribing long takes and (2) transcribing mailable letters.

Transcription requires the use of skills in typewriting, shorthand, and English. English skills include a knowledge of punctuation, capitalization, use of numbers, and

spelling. In addition, many other decisions must be made during transcription, such as those regarding enclosures, carbon notations, and letter and envelope forms. For years, students have written reports, themes, letters, and other forms of compositions for English classes as well as other classes. They have become skillful in constructing sentences that "avoid" the use of punctuation that they cannot use correctly, and they have crowded or spread words at the ends of lines to avoid word divisions. In shorthand classes, they cannot avoid punctuation, and they must divide some words to maintain a good right margin.

In longhand writing, students have developed the habit of writing sentences without punctuation, then

going back to insert the punctuation. They cannot follow this habit in transcription, because the space to insert the necessary punctuation is not available in the typed copy. The many decisions that must be made in transcribing are time-consuming, and they greatly reduce typewriting rates. The number of problems facing the student at one time must be minimized in order to avoid bad habits and to develop early a concept of mailability.

Some pretranscription experiences in the *typewriting* class that may reduce difficulties in the early stages of transcription are:

- Typing from poorly written longhand with spelling that is sometimes difficult to decipher.
- Typing from longhand or print that requires insertion or correction of punctuation while typing.
- Typing direct from dictation.
- Typing letters with carbons and envelopes to meet standards of mailability.

Some pretranscription experiences in the *shorthand* classes are:

- Reading punctuation as notes are read in class.
- Spelling in longhand selected words from the day's lesson.

Even though students may have good basic typing skill, ability to take dictation and read it back, and knowledge of English mechanics, they will forget some things as they attempt to transcribe. Because the combination of these skills presents new problems to the student, the first transcription material should contain the simplest combination that will permit smooth transcription with reasonable accuracy. Typewriting rules will have to be reviewed, letter forms illustrated, and punctuation rules recalled. As soon as students have transcribed satisfactorily some long takes dictated at 60 or 70 words a minute, they are ready to use the standard of mailability with letters and memoranda. A mailable letter is one that is transcribed, spelled, and punctuated correctly, and the appearance of which is so neat that the most discriminating correspondent would sign it for mailing.

### **Mailability Is the Standard**

From the first day of letter transcription, mailability is the only standard of acceptability of letters. Students may consult the dictionary for spelling and their textbook or reference manual for punctuation rules. This time is part of transcribing time, but it is worth taking in order to have absolutely correct letters. In striving for this perfection of transcript, students have stronger motivation for mastering spelling and punctuation than they have ever had in English classes. Students should devote most of their transcription efforts to their own notes taken from dictation; they must learn to read their own peculiarities of penmanship.

The teacher should make a tabulation of the common errors made each day in the transcription period and plan remedial instruction that will be helpful to the class as a whole. Suggestions to individual students can

be made by notations on the papers returned to them each day.

Some factors require special consideration in teaching transcription:

**MARGINS.** Unequal margins make a letter "unmailable." Students who cannot readily "see" that their right and left margins are unequal should be shown how to fold a letter without creasing and hold it to a light to compare margin widths. The teacher should explain word division to individual students who have typed ragged right margins, then have the students retype the letters to improve the margins.

**ERASURES.** Neat erasures in a very limited number are acceptable in a letter; however, a readily observed erasure or more than three or four erasures on one medium-length letter make it unmailable. Occasionally, words can be spread or squeezed with such care that they will be acceptable corrections. The paper for transcription must be of such quality that acceptable erasures can be made readily. The best method of erasing with carbons must be reviewed frequently in the transcription class. Students should use a card or shield on top of the carbon paper instead of a piece of paper underneath the carbon sheet. They must learn to avoid carbon smears caused by the rubbing of fingers or carbon paper against second sheets. An emery board is useful for keeping the eraser free from carbon and ribbon ink. The student should watch for "trees" on the carbon copy and substitute new carbon paper as soon as it is called for.

**PROOFREADING.** In order to avoid the necessity of reinsertion of papers in the typewriter for correction, a student should proofread a letter before it is removed from the typewriter. Because any kind of error on a transcript makes it unmailable, students must realize the importance of finding that "last error" on the transcript and correcting it. A teacher who grades a transcript solely on the basis of mailability places a premium on good proofreading. The correction of the last error makes the difference between a letter that will count for the student and one that will be rejected. The use of the plan of accepting letters, possibly for reduced credit, that have "correctable" errors tends to discriminate unfairly among students; this writer rejects it for grading transcripts. In one case, for example, the word *to* was transcribed by two students as *through*. One of the students had, because of his letter placement, typed the word at the end of a line and could correct it without retyping the letter; however, the other student had typed the word at the middle of a line and had to retype the entire letter.

**SPELLING.** Any misspelled word in a letter makes the letter unmailable. Words that students commonly misspell should be given as drill material in the form of occasional direct dictation to the typewriter as isolated words and in sentences, and should also appear at regular intervals in the dictation so that the students

will learn to type them without constant reference to a dictionary. Students who have need for frequent reference to the dictionary during the transcription period should have a small dictionary or *20,000 Words* at their desks to save the time of standing in line to use the big classroom dictionary. Each student may also make his own individual list of words he has misspelled and use it as a handy reference while transcribing.

**WORD DIVISION.** Errors in word division also make a letter unavailable. Seldom can a student avoid word division completely and still maintain a reasonably even right margin. Rules for word division, however, should be kept to a minimum. Students should be given a list of words that are frequently used and frequently missed, such as *serv-ice* and *knowl-edge*. They should consult the dictionary whenever in doubt about any word division—they should not just “take a chance.”

**CONFUSED WORDS.** Proofreading will not always catch words that have similar pronunciation and are substituted for the correct word. Words such as *counsel* and *council* are interchanged because the student does not know the difference between the words. Definitions must be provided for words that are frequently confused. These words must occur often enough in letters so that students will learn to select the proper word quickly.

**PUNCTUATION.** A punctuation error in transcript makes it unavailable. The transcription class should review the basic rules of punctuation before taking letters.

**LETTER PLACEMENT.** Poor vertical or horizontal placement of a letter makes it unavailable. Students must learn to estimate letter lengths from the number of lines in their shorthand notes and the number of paragraphs in the letter. For office-style dictation, the student will have to adjust his method of estimating lengths of letters in accordance with the number of corrections or insertions in his notes. Letterheads should be used on all letters so that the slight adjustments will be made for the variations in amount of printing on the letterhead. Even though the first few letters dictated in transcription should be the same length, the teacher should introduce letters of varying lengths later, so that students may learn to make quick decisions on change of line length and change of top margin.

#### WHEN IS TRANSCRIPTION BEGUN?

Students should transcribe on the typewriter during the last six weeks of first-year shorthand if (1) some of them expect to work in offices during the summer using their shorthand or (2) many of them are taking only one year of shorthand. If more than one year is available for shorthand instruction, a full semester should be used for special emphasis on transcription, and at least half the transcription time should be used for mailable-letter work.

*THIS IS THE FIRST in a series of four articles on transcription. Next month, Elise Davis will present a practical plan for teaching punctuation. In April, Ruth Anderson will include a plan for integrating the various factors in transcription. In the last article, George Wagoner will discuss evaluation and grading of transcription.*

Some teachers plunge into transcribing by dictating a few letters and telling the students, “Now, go transcribe.” By sheer repetition and error checking, the students may eventually learn to transcribe mailable letters at a good speed. However, this procedure is wasteful of time and materials. For economy’s sake, carefully prepared instructional materials are needed.

#### HOW TO TEACH TRANSCRIPTION

Regardless of the textbook being used for shorthand or transcription, the teacher may follow a definite plan in teaching transcription. He may prepare his own supplementary material to fit the needs of the class and to fit a certain pattern of instruction. This is the pattern of instruction that will be developed in this series of articles.

- Review a limited number of factors for transcription, such as letter forms, spelling, confused words, or punctuation.
  - Dictate letters requiring only the use of factors reviewed.
  - Have students transcribe these letters while you move around the room, glancing over their shoulders to note errors in any of these factors. Call individual students’ attention to these errors. Check and return to students the next day all letters that you do not check completely as you move about the room. Mark each letter “mailable” or “unmailable.” Make notations of errors observed frequently so that you may give remedial instruction the next day.
  - After two or three days of practice on letters including the factors of transcription being emphasized, dictate other letters with similar transcription problems. On this day, give students no help during the period. However, let them refer to their dictionaries as often as necessary. Grade according to mailability the letters transcribed within the 25- or 40-minute period and consider them in determining the grade for the term.
- Then, begin the cycle again with the teaching of additional factors, practice days, and a test day. Whenever the students do not do well on a test day, use a few minutes of the following session for remedial work before presentation of the next factors to be emphasized.
- Experimentation at the University of Tennessee has shown that good results can be obtained by following the pattern of instruction just outlined.



**LLONA B. PARSONS**

Miami (Arizona) High School

**Teacher** Mary Ann Gillespie, Miami High School, dictates public-relations letter to Mary Ann Talley, an advanced-stenography student.

## **Problem:** PUBLIC RELATIONS

## **Solution:** ADVANCED STENO CLASS

**T**HE IDEA of integrating public relations with the teaching of business-education courses was not, strictly speaking, my own idea. It had its start when my son became a member of the United States Navy.

Of course, I was eager for any bit of news concerning his progress. When he went to Los Angeles for his swearing-in, I was pleased therefore to receive a mimeographed form letter, telling me that he would leave for San Diego that night and what his preliminary course of training would be.

Other form letters soon followed. One arrived from his commanding officer when he was made a petty officer in his recruit company. The *piece de resistance* came at his transfer to a duty station, when I received another form letter and a picture taken on his arrival at the base. Needless to say, all this attention, regardless of the fact that it was a mimeographed, form-letter attention, made me a booster of the United

States Navy and a confident mother.

This had happened during the summer months, and I began to think of the process in relation to the coming school year. I recalled the letters that go out from the high school—poor-work notices, telling parents that Johnny had better get busy or else; letters from the principal's office asking Papa to call and discuss what we are going to do with Steven; telephone calls from teachers, asking Mamma what can be done about Johnny's attitude. I thought of our annual Honor assemblies, in which a handful of the brains of our youth receive recognition, and of our athletic assemblies, in which the brawn of our youth is rewarded.

But what happened to the middle-of-the-road students, those who seem to make up the majority of the students? There were those who served on the election board; those who were co-operative and conscientious, but not exactly the top; the willing workers who ushered at school functions;

the students who were home-room chairmen; and those who worked on the traffic patrol or were the intramural home-room captains.

These good-spirited students seemed to be lost in the shuffle; and yet, without them, our school would cease to function.



**Before** Mr. and Mrs. Garnett Eidson open school letter handed them by Beverly, they study it apprehensively



After thinking things over, I realized that my affection for the Navy had been fostered because the Navy seemed to be concerned with the fact that my son was a citizen in their care. Couldn't our school make the parents feel the same way about Miami High School? Couldn't we change the feeling that parents have when they go to the mail box and see an envelope with the school return address—the feeling of fear and trepidation—to one of anticipation? It would be a slow process of re-education, but a worth-while one.

Since our lone school secretary couldn't possibly handle one more job, I thought of my advanced-stenography class. Couldn't this project be handled through the class, without exploiting the students, as a first-class teaching project?

At our first faculty meeting, I presented and explained the idea. At the end of the first three minutes, I could almost see the thoughts flitting through the teachers' minds. When would they have time to write such letters? With an overcrowded schedule, how could they neglect their actual teaching duties just to make Mamma and Papa feel better about Sonny's being in Miami High School?

And then I got down to brass tacks. I explained that I had twenty young ladies in a class called Advanced Stenography. They had developed a certain proficiency in taking shorthand dictation, or they wouldn't be there. It was going to be my pleasure this year to teach them to turn out a good-looking letter that could be signed and mailed. Their services would be offered to the school, and in return they would receive practical training in producing letters for mailing. I told my colleagues that they could

either write out the letters or dictate them during their free periods. I would supply student-stenographers. At this point the plan began to have possibilities, and the faculty too became enthusiastic.

The first day of school I presented the project to my class. It is a group of superior young ladies, all eager to be stenographers. The work was to be done outside the regular class period, and they would receive extra credit for the work they did. In this way, we could still accomplish the regular class work without interruption. The plan met with complete approval. Immediately they began to think of themselves as real, honest-to-goodness stenographers.

Anyone who has taught a class in transcription, or office practice, knows that one of the most difficult things to teach is personal pride in one's work. A student will turn in a letter with a carbon smudge or a poor erasure just to get the letter in and get some credit. Turn this same student loose on a letter typed on a proper letterhead and actually going into the mail, and she would rather die than have it less than perfect. This is a human trait present in most of us. Here I saw my chance to find out what a student would do under such on-the-job circumstances.

### An Ethical Point

Another teaching opportunity that presented itself concerned the ethics of the profession. I had always explained that the work of the stenographer was one of great confidential obligation. The good stenographer never discusses her work with anyone. It cannot be used as juicy gossip at lunch, or a conversation piece at home. I explained that the letters were to be held in the strictest confidence. Even if Mary had taken a letter of commendation concerning her best friend, Sue, she couldn't speak of it unless Sue herself told her that her parents had received such a letter.

The class and I entered on a grand conspiracy. We had a secret!

In addition to this, my students had a fine opportunity to work on their own public relations with other teachers. They took the dictation, presented a beautiful letter for signature, and Miss Smith or Mr. Brown began to take a little more notice of the girl doing such fine work.

The project cost the school a few three-cent stamps, but it should pay off in a million dollars' worth of good



**Student Mary Ann White transcribes public-relations letter. She receives extra credit for doing this kind of work.**

feeling. The reaction of the parents has been worth noting. I started off the dictation by sending letters of commendation to the parents of students elected to various responsible positions in my home room (i.e. home-room chairman, traffic patrol and intramural captains). The day after the letters were mailed, one of the girls, whom we shall call Beverly Jones, came breathlessly to me and said:

"Mrs. Parsons, you scared me to death. Last night I went to the post office and there was a letter from the school. I was afraid to take it home. My mother was afraid to open it. We wondered what I had done wrong. And when my folks read it they were so tickled!" Mrs. Jones felt as if she belonged to Miami High School, too.

About time for public relations, don't you think?

My class isn't overworked. The idea has taken hold slowly, but it is taking hold. Last week one of the teachers wrote letters to parents telling them that she enjoyed having each student in class. Imagine getting a teacher's note praising your child!

We have limited our work solely to letters of commendation. The poor-work notices still go out from the principal's office, as do disciplinary letters. Our spirits are high because we see only the good.

I hope our business booms. Being a mother myself, I know how resentful parents get when someone criticizes their child. I also know that there is no greater glory than to hear someone say, "My, but you have a fine son!"

Let's use business education classes to foster good feelings between the school and parents. It can work, and it adds to the fun of teaching.



**After changing her dress (an excuse to leave room), Beverly returns to find her parents smiling at letter.**

# THE CASE FOR OFFICE-MACHINES COURSES

LAWRENCE W. STEIN

Union Free High School, Wilmot, Wisconsin

**A** HIGH SCHOOL office-practice course is usually limited to typing, shorthand, and filing. Although teachers and book companies have included some of the machines of modern business in their course, they have generally done so on an introductory, familiarization level. Because of the cost of machine training in high school, its importance has been minimized.

Each time office machines is suggested as a high school course, this subject of cost is the first item brought up. The statement that five Comptometers will cost \$2100 brings an immediate response—the school can't afford such an expenditure. Administrators ignore the fact that the life of these machines is twenty years or more, making the cost \$20 a year per machine. Yet, we spend about \$75 every four years, or \$18.75 a year, to replace a typewriter.

Let's add up the cost of equipment for a basic office-machines program, ignoring any trade-in value machines might have at the time of replacement:

Number of Machines	Make	Cost per Year
5	Comptometers	\$100
1	Electric Adding Machine	22
1	Rotary Calculator	40
1	Desk Posting Machine	45
1	Stencil Duplicator	25
1	Spirit Duplicator	
1	Dictating Machine	30
2	Hand Adding Machines	10
13 Units	TOTAL	\$272

These thirteen units will enable from thirteen to seventeen students to be in one class (six students can be instructed on the stencil and spirit duplicators at one time). Smaller classes than this are desirable; they enable the student to use each machine for a longer period.

Most of our high schools now own at least twenty typewriters. If these machines are replaced on a four-year schedule, replacing five machines a year will cost at least \$75 a machine or \$375 a year—forty per cent over the cost for a machines class.

The most pertinent fact to remember is that, when high schools started to teach typewriting, school boards had to meet the same problem now facing them in regard to machines classes. The expense was just as great, and at that time they had less money available to meet the demands of our schools. The chance of convincing boards of education of the necessity and practicability of office-machines training has improved.

It is now up to the individual teacher to compile a case strong enough to convince his principal or superintendent of the need for a machines course in his school. A complete report of the cost of machines is one basis for promoting the course. A comparison to the typing course expense in your school will probably be your best type of comparison, for the expense of typewriters is a common and constant one.

Some factors to consider in "selling" the course follow, beginning at the lower left:

**Lay the groundwork with industrial surveys.** Such surveys may cause the teacher extra work, but the effort is worth while. A personal visit to plants and offices in your vicinity will give you a solid foundation for your request for specific machines. If the proportion of one machine is high in your locality, this fact should carry weight in your planning for equipment. This survey will be your primary source of facts-and-figures material.

**Show students the need.** High school graduates earn a living from the training they have received in school. In presenting your case, emphasize the idea that every school should meet the needs of its students. In a large city, a course

that is not offered in high school may be obtained by attending a vocational school. No such opportunity is available for the average school student, but it is your responsibility to see that he receives the things you and *only* you can get for him.

**Provide a means of earning a living.** A high school course in machines can prepare a person to support a family without further training. To the employer, having a high-school-trained employee means that each machine will be used to its greatest capacity without the need for training at the company's expense. Today, many high school graduates who enter the field of business as a life work are finding that machines training is a first step to success.

**Stimulate your own professional growth.** An office-machines course is a challenge to any teacher. It will force you to teach three times as much information as is included in any other of the commercial courses in your school, and you will teach it to three, four, or five students on different machines at the same time. You must receive training, or train yourself, to operate all the machines at peak efficiency. You can't help acquiring a new skill; thus, you can't help growing professionally.

**Increase finger dexterity for carry-over.** Machines training makes for greater typing skill. Furthermore, gaining an acquaintance with any one office machine makes it easier for the student to learn to operate

another machine, enabling you, the teacher, to cover more ground than you would normally expect.

**Increase understanding of mathematics.** One of the outcomes of a machines course is to make the student aware of the properties of mathematics, and the relationship of the four fundamental mathematical properties to each other. With this new insight, the student becomes a better worker.

**Pave the way to better-paying jobs.** Today, our Government is employing more and more workers in the clerical fields. Because salaries are relatively high in Government employment, more and more of our graduates are drawn to this field. The diversified work that these people must do makes the special training of a machines course invaluable.

**Build up school-industry relationships.** When students leave high school with a knowledge of machines and start to work in offices in your area, businessmen will soon become aware of the training they have received. Every school is constantly striving for recognition. As students prove the value of machines courses by their ability to operate the machines in offices, the school's reputation will be enhanced.

**Train handicapped students.** Most office machines are operated with one hand. The Comptometer requires only the use of the first two fingers of the right hand to master addition. A person who is handicapped by the loss of fingers can still become a trained and skilled operator of such a machine. He can also operate the bookkeeping machine, rotary calculator, and full-keyboard adding machine, all of which require only a minimum use of other fingers or thumbs.

**Keep pace with the times.** Office practice trains students for the fields of typing, filing, and secretarial work in general. Office machines courses open the entirely new field of machine operators, who today are becoming more and more important. Each year brings advances in the use of machines to do slow, tedious operations that were formerly carried out by hand. Certainly, this is your final argument in presenting a plea for an office machines course.

# Diversification VS. Uniformity

MARY WITHEROW

Beaumont High School, St. Louis, Missouri

**T**O BORROW a current teen-age term from my secondary students, the program that I had been assigned last semester was "neat."

When I looked at the schedule and saw that it called for Typing 1, Typing 2, and Typing 3, in addition to Stenography 1, I must admit my first reaction was—that's a pretty heavy schedule assignment. (For those not used to this nomenclature, this is first-semester, second-semester, and third-semester typewriting.) In considering this a heavy schedule, I was thinking in terms of the class preparations and the mountains of typing papers that the students would be submitting for checking.

As I look back now, this novel assignment was the nicest one I have ever had. In the past, I had taught all the typing courses in a small school. There I got the beginning students, saw them again the second year in advanced typing, and eventually taught them secretarial practice. Year after year, I could see the value of the material learned in one term as it was applied by the students in the next. However, this assignment to teach *three* various levels of typing at once was the first real chance I had had to synchronize my teaching. One difficulty was that the classes did not contain the same members, so I had to allow for individual variations; but, it still gave me a greater chance to integrate the three semesters' training.

I'd like to cite a few fallacies in the commonly accepted idea of giving the same person all the Typing 1 or Stenography 1 classes "to lighten the overworked teacher's program."

First: I am not new in the teaching profession; but, if I were, I can think of no better way to become acquainted with the course content of an entire typing program than to be

assigned a class on each level. After a teacher has once taught Typing 1, there can be little doubt in her mind as to what foundation should be required for Typing 2; but I have never had such a first-hand chance to evaluate the materials on the different levels as this diversified program offered. As I caught a weak point in the Typing 3 class, I could lay more stress on carbons, tabulation, or whatever it might be, in Typing 1 and 2.

Along this same line, I can think of no better aid to enable a person to serve with enlightenment and comprehension on a book selection committee, or a course of study revision committee, than to have had a diversified program that enabled her to peruse the entire text within such a short period of time. Last year, our school adopted a revised version of the text in mid-term, and this was my first chance to try out each of the lessons on a three-semester level.

## No Boredom

I am not saying that a diversified program is a "snap"—no teaching job conscientiously undertaken is—but I am saying that it certainly never causes one to be faced with the monotony of repetition. I've taught four classes of students who were in the same term, and stood in class trying to remember whether I had explained that particular item to this class or to a similar group. The varied program gives one a chance to integrate materials, become acquainted with the content of the entire course, and evaluate texts and courses of study.

Teaching typing on all levels at once can prove a real challenge, if you will only let it. I am glad I was not assigned three terms of Typing 1, but was given this chance at all levels. I believe that uniformity, in this sense, leads to monotony and that diversification is one answer.

# Encourage Students to Do "FREE TIME" Jobs

## HOW TO USE FREE TIME IN THE OFFICE

- Offer to help co-workers.
- Straighten your desk.
- Fill fountain pens; sharpen pencils.
- Clean typewriter and change ribbon if necessary.
- Replenish your desk supplies — stationery, paper clips, ink, notepads, etc.; clean out drawers.
- Work on the files—set up new folders if needed; replace worn-out folders or labels; transfer inactive materials; remove out-of-date materials; straighten material in folders.
- Straighten supply cabinets, drawers, or other equipment you use—arrange to suit your convenience; label the shelves; prepare an inventory check sheet for ordering these supplies.
- Check inventory of supplies; order any needed.
- Bring your notebook up to date—type up any notes written in pencil.
- Prepare a list of customers' names, addresses, phone numbers for quick reference.
- Stamp ahead envelopes used in bulk mailings.
- Address ahead envelopes used in bulk mailings for advertising materials or monthly statement.

Here's how one important mark of a good office worker can be developed in the classroom

### VIRGINIA D. HENNING

Edison Technical School, Seattle, Wash

**M**OST OFFICE WORKERS hope that "maybe tomorrow" there won't be quite so much to do... "maybe tomorrow" there will be one moment of leisure.

The experienced office worker knows better than to have such vain hopes. She knows that if she properly plans the work to be done, there is *no free time*.

Most secretaries are kept fairly busy just trying to keep up with the work as it is given to them. All precious "spare" moments are spent in stamping or addressing ahead, keeping files in order, and the like. End-of-the-month peak loads and rush jobs can be greatly lessened by spreading at least part of the work over the month.

Do you *teach* your students how to plan their work to avoid lulls and peak loads?

Why not duplicate the list of free-time suggestions shown at the left so that each student may have a copy? Discuss each item. Ask students for examples of jobs that can be done to make the work load more uniform through the month. Compare the work of large and small concerns. Explain cycle billing. Determine with the students whether any jobs connected with billing, mailings, payroll, posting, or closing books could be done in advance of the scheduled time. Help them realize that it is the willing and the more efficient worker who is always the one considered for those enviable promotions.

Do your students think that an

employee who is very efficient and has finished all her work is justified in reading a magazine? Tell them this true story:

Recently, an office manager was explaining that one of his staff was definitely up for promotion, but that another member would not be considered, in spite of her excellent ability. Why? Because the second worker would, as soon as she finished her own work, read a magazine instead of offering to help others in the office. The manager believed that this employee's training had been lacking because she did not realize that her individual job was only a small part of the larger job being done by the entire office force. She failed to see that, so long as *anyone's* work was not completed, *her* work was not completed. She was using her free time—for which the company was paying her a salary—to read a magazine. She lacked a sense of responsibility. She would not be promoted.

If an employee should happen to finish the work at hand, she should immediately find jobs to do that contribute to the smooth functioning of the office. She should have enough initiative to do this without being told.

The classroom provides limitless opportunities for the teacher to help students develop this desirable trait. When students recognize that they should help to keep the room in order and that they can do many routine jobs on their own initiative, the teacher will be relieved of many time- and energy-consuming tasks. Her sincere gratitude, expressed freely, will be the only motivation necessary.

(Continued on page 38)



# Automation and Business Education



The operator's console of IBM's 705 electronic recordkeeping machine controls all the unit's functions directly.

## 2. Automation's applications and problems

JORDAN HALE, Girls High School, Brooklyn, New York

ONE of the main characteristics of automatic computers like Univac (made famous during the last presidential election) is their fantastic "memory," in which they store as many as 120,000 characters representing—in coded form—numbers, letters, symbols, or words. These numerical or alphabetic characters may represent names, dates, wage rates, guided missile velocities, temperatures, utility rates, or just about anything else. Another characteristic is their ability to perform mathematical computations with unbelievable speed—up to ten million operations an hour—and then to check themselves in all their operations. As a matter of fact, Remington Rand, manufacturer of Univac, claims that there is no known instance of Univac's making an error that the machine itself did not detect.

In addition, a computing machine like Univac has, as a component, a high-speed printer that is capable of printing an entire line of 130 char-

acters at one time at a speed of 600 lines a minute. An IBM printer prints 150 lines a minute at the rate of 1,050 ten-digit numbers a minute. Also, if desired, the results can be transferred to punched cards at a rate of 2,400 ten-digit numbers a minute.

### Programming Comes First

The first step in operating automated equipment is "programming." In programming, a person who is thoroughly familiar with the data-processing requirements of a problem in science or business, or with the manufacturing requirements of a product, draws up a plan for processing the information or product. After a program has been set up, it must be "coded"; a coder translates the program or master plan into a detailed set of instructions that the machine can understand and handle—add, subtract, compare, read, write, etc.

Information (instructions in coded form) is fed into the equipment by

means of punched cards, perforated tape, or magnetic tape. One of IBM's 2,400-foot magnetic reels carries more than five million characters, a figure roughly equivalent to the total of all the numbers in the 1,850 pages of the Manhattan telephone directory. The fantastic speed and incredible accuracy of electronic machines has made it possible to eliminate the tedious manual computations hitherto unavoidable in obtaining certain kinds of vital data. The IBM 701 is capable of performing more than 16,000 addition or subtraction operations a second, more than 2,000 multiplication or division operations a second. The need for an electronic machine that will carry out thousands of operations a second is illustrated by the fact that the solution of a well-known partial differential equation useful in aircraft wing design requires eight million calculating steps per case. The solution must be carried out step by step—Step 100 cannot be computed

until the result of Step 99 is known. Consequently, only one man, working with pencil and paper or one machine, can be occupied with the problem at any one time. The 701 completes the solution in a few minutes. A man working with a desk computer and using the same method would require seven years.

In order to avoid any misunderstanding or misconception as to the capabilities of these remarkable machines, it must be realized that they are incapable of independent creative thought or initiative. They can do only what they are told to do; without step-by-step instructions, electronic brains are absolutely useless. They cannot decide what to do with the figures they process or how to apply them to other aspects of a problem. Only *people* can do the creative thinking. In other words, they are extremely efficient slaves; the expression "mechanical brain" is misleading because, in actuality, the machines are unable to perform, of their own accord, any of the human brain's higher functions—judgment, reflection, perception, etc. Even the complex problems the computers are called on to solve with such amazing speed and accuracy must first be reduced to the four simple arithmetic operations of addition, subtraction, multiplication, and division. For these reasons, writers have referred to the machines as "unusually efficient morons," "geniuses with low I.Q.'s," "brilliantly stupid," "brainless but bright," etc.

### The Automatic Factory

By harnessing electronic brains to mechanical muscles, it is possible to set up automatic offices, automatic assembly lines, and even automatic factories. John Diebold, editor of *Automatic Controls*, writes: "But, in the long run, the technology of the electronics engineer will have a far greater effect on machine-tool design and on the construction of plants and equipment, and thus a far greater meaning for us all, than any of the more spectacular mechanized operations that have so far been installed in our plants and offices." It is the opinion of no less an authority than Dr. C. C. Hurd, director of electronic processing machines at IBM, that the completely automatic factory—real automation—is possible today and that the major sections of this factory will be the assembly line, the office, and the communications system.

The best examples of automatic factories today are power-generating stations and oil refineries. Based on the continuous-flow process, mass production of a standardized product, and electronic control, "The modern refinery," says John I. Snyder, Jr., "takes crude oil from the pipeline, barge, or tank car, flows it through the plant (the flow being directed by preset controls adjusted for the desired end product), maintains the proper operating conditions within the plant during the process, and delivers one or more products to pipelines, barge, tank car, or other receptacle at the discharge end of the plant. All of this is accomplished with relatively small outlay of direct labor cost." The crude oil flowing through the pipelines from Texas is guided by electronic impulses sent nationwide from one control center.

### Progress by Stages

Aside from the oil, power, flour milling, and chemical industries, there are, at present, few completely automatic factories in operation. Generally speaking, operations involving liquids are more easily automated than those handling solids. Naturally enough, factory-wide automation has been introduced very extensively in the production of war materials. A chemical plant in Bedford, Ohio, turns out its monthly quota of 650,000 pounds of napalm, the jellied gasoline used in incendiary bombs, with only four men and a supervisor on any one shift. Automatic control panels regulate the flow of materials and the sequence of operations. The Government-owned 155-mm. shell plant in Rockford, Illinois, is another example of a completely automatic factory. However, a number of companies have automated sections or departments of their plants. For example, the radiator-cap department of General Motors is equipped with machinery that puts together stampings, rivets, screws, gaskets, and springs into finished radiator caps capable of passing automatic inspection. Emerson Radio uses the process in assembling components in printed circuit radios, sharply reducing manufacturing costs.

IBM recently demonstrated an electronic supervisor (central control system) that automatically controls up to forty remote operations in a store, office, or factory. One man can set up the system to work indefinitely. Each of the forty operations will function

on its own time schedule, switching lights on and off, opening and closing valves, controlling air conditioning and heavy machinery, etc. It is reported that many department stores plan to install equipment of this type.

An installation used by Ford is the length of a football field. It performs 540 separate operations to turn out engine blocks at the rate of 100 an hour. One man at a control board directs the work. Previously, 75 men had been required. Plymouth has an automatic engine-assembly machine a quarter of a mile long that costs \$2,500,000.

### Dialing Is Automatic

The telephone dial exchange is another widely installed example of automation familiar to everyone. The machine that registers the time of a long-distance call, computes the cost, and puts the amount on the customer's bill is also automatically controlled. As a matter of fact, long-distance connections may soon be made automatically by means of a Direct Distance Dialing system that will, in 15 seconds, locate the shortest path from, say, New York to Seattle, make the connection, and record the bill.

As final examples of industrial automation, a production system directed by instructions in the form of punched cards can produce fifty complete electronic units—such as radios, television sets—each hour. Only four operators are required. The system follows the directions of the punched cards to prepare and test components, convey them to an assembly line, assemble and solder parts together, and test the completed units. To change from the production of one electronic device to another, it is necessary merely to change the punched-card instructions.

A new machine called "Autofab," produced by General Mills, will, it is said, assemble, in little over a minute, the same number of multiple-part electronic units that one worker now takes a full day to assemble. It requires only two workers and a supervisor, and has a capacity of more than 200,000 assemblies a month, operating forty hours a week.

Perhaps the ultimate in automation will be the use of automatic machines to produce other automatic machines!

The automatic data-processing equipment used in offices and scientific laboratories is just as revolutionary and dramatic. This is the way an

IBM unit is used in the sales, inventory, warehousing, and accounting operations of a district sales office:

"In the disc memory are inventory figures for some 15,000 items in the sales line. Also in the memory is a to-date dollar volume, a unit volume for each item, dollar and unit volumes for various groups of items, sales totals broken down by branch sales offices and by individual salesmen, salesmen's commission accounts, customers' invoice accounts, and so forth.

"Out in one of the district's branches, a salesman returns from a call with a signed order for, say, ten television sets. Immediately, data pertinent to the sale is punched into an IBM card, and the card is fed into the Data Transceiver installed beside the electronic processing machine in the district office. This card is fed into the equipment, and a writing arm begins to distribute the information to all locations in the disc memory that will be affected by the sale of ten TV sets. The on-order total for TV sets is increased by ten; the salesman's volume is adjusted upward, and his commission is calculated and commission account credited; the branch office's volumes are changed as are the district's, and so on. An order on the warehouse is automatically produced, and the warehouse TV set inventory is reduced by ten.

#### It Goes Even Farther

"This isn't all that happens. The customer's account is automatically debited. An 'electronic warehouseman' is making certain that the district's inventory of TV sets hasn't reached the re-order point. And a punched card is produced that contains the data concerning the sale of TV sets that must be relayed to the company's general offices. This card is fed into a Transceiver, and a duplicate is immediately produced at the distant general offices.

"At the general offices, the information on the sale of ten TV sets becomes a part of an accumulation of sales data coming in from all over the country. As such, it might perform any number of statistical functions. It could, for instance, become one element of the input of a sales forecast calculation being run on the IBM 705 Electronic Data-Processing Machine at the company's centralized computing center."

The insurance industry, with its staggering load of record keeping,



**Because of its speed, the Univac punched-card computer is certain to alter many long-established clerical functions.**

computing, and assorted general paper work, has been a leader in the introduction of automated office equipment. Prudential Life Insurance Company recently replaced 86 tabulating and accounting machines with one IBM 702, which will service 80,000 policies a day, sending out annually ten million premium notices and accounting for an equal number of remittances. This machine will do the work formerly done by 200 people. The Franklin Life Insurance Company has bought a Univac that will also replace 200 people. This machine will effect an estimated personnel savings in clerical hours totalling approximately \$425,000 annually and will pay for itself in four years or less. This equipment will perform all functions involving highly repetitive tasks—e. g., premium billing, premium accounting, dividend accounting, agency commission accounting, and valuation. John Hancock uses its three IBM 650's to calculate commissions involving more than 7,000 of the company's agents around the country. Other jobs being assigned to it include policy valuation distribution, the preparation of mortgage tables three years in advance, actuarial work, and the computation of cash values and dividends for over 300,000 pol-

icies every month. This last job requires that the machine "remember" nearly 1,000 instructions. It reduces the number of steps in accounting procedure by more than 80 per cent.

The Electronic Statistics Machine, developed by IBM for use in compiling the 1950 census, combines in one operation the simultaneous functions of classifying, counting, accumulating, and editing. The machine then prints the statistical data resulting from groupings of information and automatically balances the totals to insure their accuracy. Before the ESM was developed, these functions required one or more operations with a number of machines. It is estimated that, working by hand, it would have taken 500 people all their working lives to accomplish what the ESM did during the 1950 census period. It is anticipated that the computers of tomorrow will handle such additional governmental operations as Patent Office recordkeeping and processing of postal money orders.

A new electronic bookkeeper called ERMA (Electronic Recording Machine-Accounting) has been hailed by the Bank of America as the greatest advance in bookkeeping in the history of banking. This machine can do all the bookkeeping on 50,000 checking

accounts a day. In addition, it sorts checks and deposit slips and enters the amounts like lightning on each customer's account. It will also prepare and print customers' monthly statements at 600 lines a minute.

IBM has even devised a typewriter with an electronic "memory" in which a typist can set words or combinations of words or other typewritten characters. In operating the machine, the typist proceeds to write a letter in the normal manner until she comes to a word or phrase that is already in the vocabulary. She then depresses a foot pedal, touches the proper key, and the electrical "memory" sends electrical impulses to the Wordwriter.

The impulses actuate the keys of the electric typewriter. At the end of the word or phrase from the "memory," the machine reverts to conventional operation. Later, when another phrase already in the vocabulary appears in the text being used by the typist, she again works the foot pedal and calls on the machine to do its own typing. Thus, the "memory" of the machine can be stocked with such common expressions as "Dear Sir," "Very truly yours," "Thank you for your attention to this matter," etc., each to be typed as the need arises.

### "One-Shot" Paper Work

The National City Bank, in experimenting with an IBM computer, set up a trial problem that normally requires 1,000 man-hours; the machine did the job in 9½ minutes. The ultimate goal of the Chesapeake and Ohio Railroad in its use of its Univac is "one-shot" paper work. This means preparing a basic document—a waybill, for example—just once, recording its contents automatically, and using and re-using the same basic data for all subsequent purposes throughout the company.

Another Univac, used by one of the largest abrasives manufacturing enterprises in the world, handles 130 punched cards a minute in the billing process, extending the cost, ream equivalents, and list price, and discounting the list price, using a chain of discounts that has been stored in its memory. Before arriving at the total figure, the computer calculates the amount of state sales tax due and adds or subtracts freight charges and allowances. The branch offices of this particular company do their own billings by hand. When copies of these bills are received in the home office,

information is transferred to punched cards and run through the computer for accounting and sales statistical data. In this operation, there is an added feature in that the computer checks the invoice total as billed by the branch. Any manual errors in excess of ten cents are flagged by the computer for later checking!

### Multiple-Purpose Use

Many industrial firms use their computers for both their technical and their clerical operations. Lockheed Aircraft, for instance, computes all types of problems on flight paths, heating effects at high speeds, etc., during most of the week; then, for one hour each week, the company uses its IBM 650 to run off its hourly payroll, a job involving nearly one million operations. Standard Oil of Ohio uses its computer to investigate problems dealing with oil refinery operations; on the office side of the business, the computer spends six to eight hours a week automatically processing the payroll and producing checks for 5,500 employees.

Why automation in factories and offices? There are, of course, many reasons. Let's examine some of them:

**Lower Costs.** Probably the primary incentive is that business hopes to cut current high labor costs either by decreasing the labor force or by increasing labor productivity. Plymouth, for instance, is reported to have cut its engine assembly costs by fifty per cent and reduced by twenty to twenty-five per cent the amount of labor required after installing its new automatic assembly machine. In the napalm-production operation cited earlier, costs are 59 per cent lower than with conventional methods.

A speaker at the First International Automation Exposition hailed automation as "solving the cost problem, which is the greatest contributor to the so-called ulcer approach to big business." A leading automation consultant, Hiram S. Hall, in a speech to the American Management Association in May, 1955, said that labor is "pricing itself out of the market" and forcing management to turn to automation as a means of reducing costs. It is precisely this cutting of costs by means of the mass dismissal or displacement of workers that has led labor unions to view automation with such uneasiness, even fear.

Peter Drucker describes as follows

the mechanics of cutting labor costs by substituting machines for men:

"Automation can be defined simply though superficially as the use of machines to run machines. We use machines today primarily to do things to material; to cut it, to sew it, to heat it or to cool it, to mix it or to separate it. But for machines to be able to perform these functions, four things must be done to help them. First, material must be moved—to the machine, in the machine, from the machine. Second, keeping the machine doing its job requires a lot of routine judgments: Is the tool getting too hot? Is the speed right? Do the pieces come out the way they should? Third, the setting of the machine (and the tools in it) has to be changed every so often—in most production jobs, very often. Usually the machine has to be stopped to do this, has to be opened or partially dismantled and then put together again, all by hand. Fourth, and finally, we need a lot of information to keep the machine running—the number of pieces it turns out, what kind of pieces, how fast, how many of them are faulty, and so forth. This information has to be gathered together somewhere, to be interpreted, and to be passed on to other people.

"On the whole, astonishingly little attention has been given by engineers and production men to these four jobs. Yet we have known for a long time that they cost more than the actual fabrication done by the machines. They take more people and more time (in a typical metal-working plant, for every hour the machine works, at least five, sometimes even ten, man-hours have to be spent on them), and they account for practically all the employment on the production floor of a modern plant. Hence the importance of automation, for in essence it means that these four jobs of (1) materials handling, (2) routine judgment, (3) machine setting, and (4) data processing are done by machines—in a fraction of the time and at a very much lower cost."

**Labor Problems.** In addition to its potential as a means of cutting costs through reduction in the labor force, another highly desirable feature, in relation to labor, is the fact that "machines are easier to control than people (and this is a pleasing fact in our democratic society). The

(Continued on page 29)



# School for Manners

**C**LOTHES may "make the man," but they also may help to make the young man a teen delinquent. This is the thought of Clarence B. Carey, principal of Chicago's unique Jones Commercial High School—a virtual school for manners.

Manners and clothes go together, says Carey. Teach youngsters to dress decently, as the occasion demands, and courtesy becomes a matter of habit. "We've found," he says, "that if a teen-ager dresses with dignity, he or she will act with dignity."

In 1941, Carey set up a five-point program that was designed to provide Chicago employers with workers not only skilled in commercial practices but well groomed and well mannered. Carey got the idea from a group of businessmen who bewailed the lack of "favorable personality factors" in job applicants.

At Jones Commercial High, the whole program is geared to giving employers "well-rounded" individuals. First, of course, all the 500 youngsters are taught fundamental skills—typing, stenography, office practice, and the rest. But, Carey and his staff go one step further: they consciously try to make the two-year curriculum a workshop in self-improvement.

This is what they do:

**Teach good taste in selecting a wardrobe.** Every one of the 475 girls must come to school neatly dressed. Teen trademarks—blue jeans, bobby-sox, skirt and sweater—are out. Senior girls must wear hats.

As for the 25 boys, they're required to wear ties.

But this isn't all. In a course called "Grooming," a former model, Martha Zaharchuk, teaches how to select the proper dress for school, office, and play. The girls look forward eagerly to an annual fashion show—attended by some 2,500 people one year—in which students model clothes lent by Chicago stores.

The aim of this part of the program, Carey explains, is to have his



Martha Zaharchuk shows off Jones students she has trained in grooming.

students dress "as though on the job already."

**Teach good grooming.** From keeping lockers spick and span to showing up in class scrubbed and brushed, no one is allowed to forget the importance of cleanliness. Miss Zaharchuk teaches the girls how to keep personally attractive by using eye-catching hair styles and proper make-up. Even nail-care is considered. And the boys (shades of Tom Sawyer!) are told to keep their hair combed.

**Teach good posture and poise.** In physical education class, Ruth Mary Gorman teaches her charges how to avoid looking like spineless sacks of potatoes. She has them parade around the room with books on their heads (they find this fun) and, twice weekly, conducts exercises to "improve construction of the body and circulation of the blood."

One really has to practice to be ready for that big fashion show!

**Teach good manners.** How to act is stressed throughout Jones' program—whether a youngster attends grooming class or typing class. Jones-

ites get a chance to show off what they've learned about manners in public-invited events—Open House, a variety show, visits of celebrities like Frankie Laine.

Furthermore, in English class, the soon-to-be employees learn "voice grooming" and telephone manners. All this is in addition to selecting good reading.

Jones conducts a year-round activity program that is noteworthy because the emphasis is on doing things. Through school clubs, students learn to roller skate, to swim, and to ride horseback. And they learn to dance, at school dances.

Students spend a regular five-hour day at school, plus three hours on the job as part of the co-operative work program the school has pioneered. In school or out, however, they know how to dress and act.

So well prepared are they that Chicago businessmen fall over one another to get a Jones graduate—there are twenty to twenty-five calls for every one. What could be a better indication of the success of this unique school for manners?



EARL W. BARNHART

# Reducing Typing Errors

A FIVE-PART SERIES

## 5. Errors made by transposing letters

**T**RANSPOSITION substitutions by corresponding fingers are included in the last group of explainable errors tabulated in D. D. Lessenberry's *Error Chart*. These substitutions occur when the finger of one hand strokes a key that the typist intended to stroke with the corresponding (homologous) finger of the other hand. For example, the *t*-key should be stroked by the middle finger of the right hand and the *e*-key by the middle finger of the left hand, corresponding fingers stroking corresponding keys. About 24 per cent of all substitutions recorded for the *t*-key were imprints of the *e*-key—the left-hand middle finger had stroked a key corresponding in position on the keyboard to the key the right-hand middle finger should have stroked. In other words, the right movement was made by the corresponding finger of the wrong hand.

Substitutions due to strokes made by a corresponding finger of the wrong hand total about 10 per cent of all the substitutions detailed in the *Error Chart*. Transposition substitutions are a very large percentage of

all the substitutions for corresponding letters.

The most likely causes for these transposition substitutions are (1) failure to see clearly each letter in the copy; (2) pronouncing letters as they are typed; (3) confusion in the motor impulses to the finger-moving muscles. These causes indicate the changes that should be made in typewriter learning exercises.

Failure to see clearly each letter in the copy can be remedied by developing the habit of looking at each copy letter as the finger moves to stroke the letter-key for it. No exception should be allowed to the fundamental rule: *See a letter when you stroke its key*. The learning exercises for each new key-stroking finger movement should include directions for looking at the letter and then swinging the finger so quickly that there is not time for thinking of the name of that letter (for reasons that will be explained later). Any thinking after seeing the letter should be directed toward the details of the finger movement, so that it may be made more effectively.

An understanding of why pronouncing letters as they are typed causes transpositions and other kinds of letter substitutions requires an understanding of how the sight of a letter incites a finger movement. When the eyes focus on a letter, distinctive series, or pattern, of nerve impulses for that letter flows to the cells of the visual cortex of the brain, from where a corresponding pattern of impulses goes to the cells of the memory area for visual impressions. Impulses from the visual memory cells spread to those motor memory cells for finger movements, which respond to that pattern of impulses. The finger motor cells activated by the incoming pattern send out a pattern of impulses to the motor cells that actuate the muscles controlling the finger movement. The finger motor cells respond by sending energizing impulses to all the different muscles that contract to move the arm, hand, and finger to stroke the letter key, imprinting a likeness of the letter seen. This route from the eyes to the motor memory cells for a finger movement—here called the eye-finger route or eye-finger reflex—is the shortest, simplest, fastest route for transforming the sight of a letter into typewriting finger movements. The memory cells for finger movements are the keystone; they always must be incited before a typewriting finger movement is made.

### The Factor of Repetition

A pattern of impulses to the finger motor cells sent by the finger motor memory cells for each letter can be recalled by impulses from several different memory centers of the brain; but, this recall cannot be made unless a connection has been made previously by intentionally repeated passage of the impulses from the inciting center to the finger motor memory cells.

The speech center is the most used—and misused—center in typing classes for energizing the finger motor-memory cells. When a letter to be typed is seen and pronounced orally, the pattern of impulses from the visual cortex reaches the motor-memory cells for the speech muscles. The contractions of the speech muscles produce impulses that reach the speech-memory cells, from where impulses can go to the finger motor-memory cells. But, these impulses will not activate the finger motor-

memory cells unless a connection between the speech-memory cells and the finger motor-memory cells has been established previously by intentional repetition.

When the name of a letter to be typed is *thought*—that is, silently said—the motor cells exciting the speech muscles on receiving a pattern of impulses originating in the visual cortex discharge a pattern of impulses to call forth an associated pattern of motor impulses so that the speech muscles contract to pronounce the name of the letter. But, special suppressor cells in the motor area of the brain inhibit most of these contractions of the speech muscles so that only very slight contractions are made by each muscle—not enough to produce an audible sound. These contractions are enough to send impulses to the speech-memory cells that can incite the finger motor-memory cells if a connection between these two memory areas has previously been built up.

When the name of a letter is pronounced *aloud*, the pattern of impulses for each sound travels over the auditory nerves to reach the auditory identification centers. From here, impulses go to the auditory-memory cells and from these to the finger motor-memory cells, which respond to that particular pattern of impulses—provided a connection has been established by previous use.

### Speed is Affected

The cell processes in each of these centers take time, as measured in milliseconds. The more centers used, the longer the time between the recognition of the letter and the recall of the finger movement. The time consumed in these cell centers may total to a decisive effect on the speed of a finger action, considering that, at 30 words a minute, the time for the average key stroke is less than .4 of a second and at 60 w a m is less than .2 of a second.

When a typist looks at a letter, thinks its name, then pronounces that name aloud and listens to hear the name before he moves the appropriate finger, he uses a chain of centers including the visual cortex, the speech center for silent speech, the speech center for oral speech, the auditory center, and finally the finger motor memory. This complicated, time-consuming route is used because this series of centers has been con-

nected by practice when following the instructions of the teacher to pronounce each letter before stroking its key. It is used by practically all beginning typists who follow the instructions of textbook authors and by teachers who are not acquainted with the way the nervous system operates in typing activities.

### Problems of Changing Routes

Increasing speed in typing requires a progressive shifting to the more simple neural routes, but this shifting causes key-stroking errors, including transposition substitutions. A center is not used when the finger motor discharge is started before the impulses from that center reach the finger motor-memory cells. Thus, the auditory center is not a part of the neural route when the finger motor-memory cells discharge their motor impulses before the impulses from the auditory memory can reach the finger motor-memory cells. The oral speech-memory center goes into reserve when the finger motor memory discharges before the impulses from the speech-memory center reach it. The silent speech-memory center is bypassed when the finger motor-memory cells release motor impulses so soon after the letter is identified in the visual memory area that there is no time for thinking the name of the letter—for using the silent speech-memory center.

When the visual-memory cells can incite the finger motor-memory cells, the eye-finger route is used, with the other three memory centers ready to participate whenever there is a long enough interval between the visual recognition of the letter and the discharge from the finger motor-memory cells. The cells of the other centers are always ready to fill in any pause between the recognition of the letter and the action of the cells of the finger motor-memory area—the silent speech center usually intervenes first, the oral-speech center generally comes in next, and the auditory center practically always waits till last. Speed in recalling the proper finger movement the instant (measured in milliseconds) the impulses leave the visual-memory center simplifies the neural route between the eyes and the finger and makes possible still greater typing speed.

The simpler, faster neural routes come into use letter by letter, causing substitutions of all kinds. The eye-

finger route is used first for the finger movements recalled most quickly. The routes using the auditory center and/or oral-speech center and/or silent-speech center are used for the slowly recalled finger movements—those not immediately recalled by the impulses from the visual-memory cells. Until the eye-finger route is used for all the finger movements, each of the movements made in typing a series of letters, or a word, may travel over a different neural route. As a consequence, impulses from the second letter of a word after traveling over the eye-finger route will arrive at their proper finger motor cells before impulses from the first letter in that word traveling over a route including speech- and/or auditory-memory centers can reach the finger motor-memory cells, so the second letter will be typed before the first. Thus, the *h* in *the* may be typed before the *t*. Impulses going over the oral-speech memory route, or another slow neural route, may activate their finger motor-memory cells at the same millisecond that impulses traveling over the eye-finger neural route arrive to incite some or all of the same finger motor-memory cells already discharging impulses to the muscles. The confusion in the finger motor cells resulting from simultaneous motor impulses to the same or nearly all the same finger motor cells may account for many of the transposition substitutions occurring in this way:

### "Cross-Over"

The motor impulses to the muscles of the right-hand fingers start from the left-hand motor area of the brain; the impulses to the left-hand fingers start from the right-hand side of the brain. The nerves conveying the impulses from the right-hand side of the brain discharge their impulses into motor cells on the left-hand side of the spinal cord at shoulder level; the nerves from the left-hand side of the brain carry their impulses to motor cells on the right-hand side of the cord. The two motor areas in the brain and the two pools of motor cells in the spinal cord are connected by nerve fibers that transmit motor impulses from one side to the other. Apparently, when the motor cells on one side of the brain or of the pools cannot discharge in the usual way because of confusion or blocking of the motor discharges, the blocked motor im-

(Continued on page 38)

# How to start adult education in your town

*Follow the step-by-step advice  
of a business teacher  
who has faced this common problem  
of the small high school*

**MARVIN W. CRIQUI**

Concordia (Kansas) High School

UNTIL RECENTLY, there have been two distinct channels of education for people attempting to progress in business and in industry. These were formal education and practical experience. Now, however, we are witnessing a trend toward the merging of these two channels in the field of adult education.

Adult education is not new to vocational education teachers. However, most teachers leave the operation to their own State Board for Vocational Education. Hence, adult education is offered chiefly through well-established vocational education departments.

At present most large colleges and universities operate adult extension departments for three phases of adult education: correspondence, on-campus courses and conferences, and field extension. This is, of course, limited to large groups in the field and has a very large area to cover to be practical.

The trend in adult education seems to indicate that only the business teacher can provide the service in small localities. It is a well-established fact that business teachers are overscheduled in their work load and have little time to devote to classroom participation. However, the system used to promote the adult-education program requires little direct supervision of the business teacher. Supervision is lightened because: (1) the teacher-director may procure outside instructors; (2) the teacher-director usually knows the people of the community; and (3) the teacher-director already has access to the machines, room, and equipment.

There are two patterns for financing a sound adult-education program: (1) operating through the State Vocational Education Department; (2) making the program self-supporting, by charging an enrollment fee. Each requires its own procedure.

## **State Aid to Program**

When the first pattern is followed, the business teacher should contact his State business-education or distributive-education supervisor and ask what allocation of adult funds can be made to his school for the forthcoming year. After determining his budget limit, the teacher should check with his community to ascertain what courses are desirable. Of course, when using vocational education funds for adult education, the courses offered must be suitable to prepare workers for immediate employment or to train employees for advancement. Some courses that follow this pattern are: business law for business people, accounting for small operators, salesmanship, credit and collections, business economics, and business correspondence.

The next step is to obtain an instructor. He should be a local teacher, though (if the community is small) he may have to be brought in from a neighboring community. Usually the state salary schedule is around \$2.50 an hour for local instructors and \$5.00 an hour for instructors from neighboring communities. In some states, the business teacher who operates the program receives 15 per cent of the total salary of the instructor, figured on the local-instructor schedule.

The new instructor files a brief teacher-application form with the state department in order to obtain certification. In some cases, the instructor need not be a college graduate if he has had sufficient experience and training in his specialized area.

After the instructor has been certified, the business teacher should contact people interested in the course. If the community is small, he may contact persons individually to find their time preference and free evenings. If he cannot contact them individually, he may wish to place an article in the local paper.

This article is usually considered a community service



and will be run free of charge. It may contain instructions for interested people to call the school secretary and leave their names. The teacher-director should send a post card about three days prior to the meeting, notifying these people that it is forthcoming. This communication should be followed up on the afternoon of the meeting by a brief reminder over the telephone. When using out-of-town instructors, the sending of a post card and occasional calls to check on final details may serve as a reminder for them to attend the meeting.

### **In the Beginning**

The first meeting may be brief, since the agenda calls for enrollment and a review of the course of study. Some instructors may prefer to go directly into the presentation of the material and use the complete period. Before dismissing students from the first meeting, have them all fill out the enrollment blanks supplied by the state or the sponsoring agency.

When the course is finished, the business teacher should fill out a form that lists the number of members present and the hours taught. It should be notarized and mailed to the state department. After the form is received, your school will be reimbursed the amount of the instructor's and adult director's fees.

When using the pattern for self-supporting adult education on a local level, the director may offer any subjects that he wishes to or that are in demand. He may contact interested people in the manner that has already been suggested. A very important phase is to publicize forthcoming meetings in order to maintain good public relations in the community. After a list of interested persons has been obtained, the director will be able to decide what the materials and instruction cost will be. He will charge accordingly. The amount of the enrollment fee should be included on the first post card. This eliminates any difficulty in its collection.

### **Fees Low, Classes Small**

Studies indicate that the maximum enrollment fee for most typewriting, shorthand, business mathematics, and other text-type business courses does not exceed \$5.00 a person. In adult classes, fifteen enrollees constitute an averaged-sized class. In most locally operated courses, the business teacher gives one of the courses himself, since the rate of pay is good for the time spent in preparation and instruction.

Some business teachers have found that a combination of state aid and a self-supporting policy offers a better rounded adult program. When combining the two patterns, make a survey of the community: find what courses are needed throughout the year, make a budget and time schedule for open dates, and obtain instructors well in advance. The rest of the operation will follow the two patterns already discussed.

Studies of adult classes indicate that the administrators of most high schools readily accept adult-education courses in their schools. This is a very important public-relations tool. Adult education not only lets the taxpayer use the facilities for which he is paying his taxes,

## **TIPS AND TECHNIQUES**

### **—for a successful adult-education class**

- Keep enrollment to maximum of 15 students.
- Keep class meetings to maximum of 10 sessions.
- Do not meet more than twice a week.
- Use tables and chairs, not single-armed student chairs.
- Arrange tables in a U-shape for informality.
- Provide ash trays for smoking, if possible.
- Start meetings on time.
- Limit class meetings to three hours, with time for breaks.
- Send post card three days prior to meeting, telephone each member the day of meeting.
- Arrange meetings on nights business people are free.
- Dismiss meeting about five minutes early, so members can leave on time.
- Make brief follow-ups of the meetings to see that the instructor is giving students the information they want.
- Attempt to hand out some material at each meeting for participants to take home. otherwise, eliminate them if possible.
- Give short home assignments, if required;
- Do not test the adults in class; tests will cause them to be too competitive, and some will be skeptical of competing with other business associates.
- Offer classes that are demanded by vocational-minded people.
- Give short breaks during class time.
- Use visual aids when possible; adults like varied types of presentation.
- Use local newspaper for publicity; it is the accepted medium of communication.
- Do not offer too many courses at once; offer one course, check results, and plan next course with the interested people.

but also allows the school to help him help himself.

If the administration is not in favor of one of the three patterns mentioned, perhaps the business teacher could work with either the retail committee or the secretary of the Chamber of Commerce. A local university might be encouraged to bring in their extension courses and present programs in demand by business people.

The business-education teacher does not need to do all the things recommended. But he should do *something* to help the people that need or desire more formal education to increase their productivity and profits.

## READY-TO-USE TESTS

GENERAL  
BUSINESS  
TESTS:

# 6. Communications

INEZ RAY WELLS, Ohio State U., Columbus, Ohio

Correct answers to all questions are printed in *italic type*.

### SECTION 1

The following terms are explained by Statements 1 to 13. After each statement, write the letter representing the term that is explained.

(A) Day letter. (B) Dial telephone. (C) Extension telephone. (D) International message. (E) Leased wire. (F) Manual telephone. (G) Night letter. (H) Party line. (I) Private branch exchange. (J) Private line. (K) Private wire system. (L) Serial service. (M) Telegraph money order.

1. A telegraph service providing for delivery of the message the following morning. *G*
2. A deferred telegraph service used to send long messages either day or night. *A*
3. A telegraph service provided for businesses sending a number of messages to the same place during the day. *L*
4. A telegraph service provided for businesses that want their own means of telegraphic communication. *K*
5. A telegraph message sent overseas. *D*
6. A telegraph service that makes it possible to send money to a person in another city. *M*
7. A telephone service that provides a line connecting two business firms and reserved for their exclusive use. *E*
8. A telephone line used exclusively by one subscriber. *J*
9. A telephone line used by two or more subscribers. *H*
10. An extra telephone that is on the same line and has the same number as another telephone. *C*
11. A private telephone switchboard that is connected to a central office by two or more lines. *I*
12. A telephone that requires an operator to complete the connection for the caller. *F*
13. A telephone on which the caller himself is able to complete the connection with the telephone being called. *B*

### SECTION 2

In Statements 14 to 25, situations that require communication are given. Choose from the following list the means of communication best suited to each situation, and write the appropriate letter in each space provided at the right.

(A) Cablegram. (B) Letter. (C) Postal card or post card. (D) Telegram. (E) Telephone.

14. You are on a trip and now (at six a.m.) know that you will be able to reach your uncle's home this evening about eight o'clock. He expects you and has asked you to let him know when you will arrive. *D*
15. In planning your trip, you did not expect to be able to visit your Aunt Mary. Now that you have started on the trip, you find that you have time to visit her if the visit will not inconvenience her. *E*
16. You promised to let your friends at home know where you are on your trip and what you are seeing. *C*
17. When you return home from your trip, you want to express your thanks to the people you visited. *B*
18. In June, the Harding Coal Company wishes to place orders for coal to be delivered during the fall and winter. *B*
19. In December, the Harding Coal Company discovers that it needs additional coal immediately. The company wants to place the additional order but does not know if its regular supplier can furnish the needed coal. *E*
20. You promised to let your parents hear from you every day while you are away at summer camp. You are very busy, but want to keep your promise—at a low cost. *C*
21. While at summer camp, you lose your money. You want to ask your father to send money, but you aren't sure that he is at his place of business. *E*
22. Your father promises to send you money so that it will reach you immediately. *D*

23. Mr. Smith needs to give instructions to his buyer, who is in England but will be leaving there in a day or two. *A*
24. The buyer receives the directions from Mr. Smith, but finds that he cannot carry them out. He needs to explain the situation and get further instructions. *E*
25. You see a sweater advertised in a newspaper from a neighboring city. You decide to order it. *B*

### SECTION 3

In each of the following sentences, one or more words are needed to make the statement complete. Write the necessary word or words at the right of each sentence.

26. A long-distance telephone call in which the caller asks the operator to connect him with a specific person is called a(n) \_\_\_\_\_ call. *person-to-person*
27. A long-distance telephone call in which the caller will speak to anyone answering at a designated number is called a(n) \_\_\_\_\_ call. *station-to-station*
28. A call made between two telephones in the same locality is known as a(n) \_\_\_\_\_ call. *local*
29. A call made to a telephone outside the immediate area is known as a(n) \_\_\_\_\_ call. *long-distance (or toll)*
30. A telephone call made to a person who has no telephone is known as a(n) \_\_\_\_\_ call. *tolls*
31. Charges made for long-distance telephone calls are known as \_\_\_\_\_ messenger service *tolls*
32. A long-distance telephone call to be paid for by the person receiving it is known as a(n) \_\_\_\_\_ call. *collect*
33. When the person who makes a long-distance telephone call asks that the person receiving it pay the charges, the charges are said to be \_\_\_\_\_ reversed *reversed*
34. A book provided by the telephone company listing names, addresses, and telephone numbers of persons who have telephone service is a(n) \_\_\_\_\_ directory *directory*
35. A telegram that is to be paid for by the person who receives it is called a(n) \_\_\_\_\_ telegram. *collect*
36. A telegraph message in which a single word stands for several words is known as a(n) \_\_\_\_\_ message. *code*
37. A stamped card printed by the Government for use sending short messages is a(n) \_\_\_\_\_ card. *postal*
38. The place where mail is sent if it cannot be delivered or returned is known as the \_\_\_\_\_ dead-letter office *dead-letter office*

### SECTION 4

To the right of each of the following statements, write the letter of the phrase that best completes the statement.

39. The *cheapest* way to communicate with someone in a distant city is usually: (a) letter, (b) telegram, (c) telephone. *a*
40. The *quickest* way to communicate with someone in a distant city is usually: (a) letter, (b) telegram, (c) telephone. *c*
41. When answering the telephone at home, a courteous answer that will save the caller's time in locating the person to whom he wants to talk is: (a) Hello; (b) The Smith residence; (c) The Smith residence, Mary speaking. *c*
42. When answering the telephone in a business office, a courteous answer that will save the caller's time in locating the person to whom he wants to talk is: (a) Jones and Smith; (b) Jones and Smith, Mr. Smith's secretary speaking; (c) Miss Browning speaking. *b*
43. Monthly telephone charges are lowest for a: (a) one-party line; (b) two-party line; (c) four-party line. *c*
44. A full-rate telegram is delivered: (a) whenever it is received, day or night; (b) whenever it is received, except late at night; (c) sometime during the day. *b*
45. A night letter (telegram) is delivered: (a) early in the morning; (b) sometime during the day; (c) whenever it is received. *a*
46. If you want to send a ten-word telegram at the least cost, you should choose: (a) a full-rate telegram; (b) a day letter; (c) a night letter. *a*
47. If you want to send a telegram so that it will be received in the shortest possible time, you should choose: (a) a full-rate telegram; (b) a day letter; (c) a night letter. *a*
48. If you want to send a letter so that it will be delivered as soon as it is received, you should send it by: (a) air mail; (b) registered mail; (c) special delivery. *c*
49. If the letter you send must be signed for by the person who receives it, you should send it by (a) air mail; (b) registered mail; (c) special delivery. *b*
50. The message in a letter is called the: (a) body; (b) complimentary close; (c) salutation. *a*

(Continued from page 22)

more machines the fewer people, and therefore the easier the control problem."

Developing this aspect of the problem one step further, Dr. J. J. Brown, co-author of "Machines without Men," observed, at a *Fortune* Round Table:

"We've got a lot of men on these assembly lines. Now men, by definition, are difficult and tricky things to play around with. You have employee-relations men, time-study men; you have training and education directors; you have personnel men, washroom men, cafeteria men. You have a public-relations program. That all costs money. My point is this: if we can take some of the money that we are spending in trying to ease the pain of our assembly-line personnel, and apply that money for some research to get the men out of there entirely, we would be far better off in the long run."

There are unquestionably many businessmen who are still not reconciled to the existence of strong labor unions and the demands they make for guaranteed annual wages, pensions, and health insurance, seniority rights, installation of safety devices, and the setting up of adequate systems to handle grievances, to name but a few. The large-scale installation of automation, with its expected displacement of large numbers of unskilled and semiskilled union workers by smaller numbers of highly skilled men and semiprofessionals who, because of their strong affiliations with the white-collar middle classes, might be inclined to resist the blandishments of union organizers, is undoubtedly an appealing prospect to these die-hard employers. Machines do not strike!—although it is reported that engineers have produced in these machines something closely akin to "neuroses."

**More Information.** The use of automatic computers gives management better information much more quickly than it now gets. Systems employing the device can process business transactions as they occur, item by item, thus keeping all their records up to date and available any time management calls for them. Records affected by the transactions—inventories, sales volume, customers'



## SHORTHAND CORNER

JOHN J. GRESS HUNTER COLLEGE, NEW YORK, N.Y.

**Tests!** The first reaction of many teachers is unfavorable. It means that considerable time is required to prepare worthwhile tests, followed by the sometimes unpleasant duty of correcting, grading, recording, and returning papers.

But let us look at the other side of the desk—the students' point of view. Every time you wave a paper in front of them, they seem to fall into a swoon. Why. I've even known teachers who carry test papers to their classes day after day, just to keep their young charges under control and mindful of that dreaded day in the life of any student—test day.

Where do we fall short of doing a real, honest-to-goodness job of teaching? Are we guilty of instilling a feeling of fear into our shorthand systems? What is there about the harsh sound of that word "test"? Or perhaps it isn't the term itself, but rather the manner in which we teachers use it. Ask yourself again: "Do I do it? Am I guilty of holding my shorthand students to the whipping post called the test?"

**My daily travels to and from school** have acquainted me with a cross section of young America at all levels of instruction. Believe it or not, the thing I hear mentioned most often—or perhaps I should say overhear most often—is the discussion of tests. Comment by students is not always complimentary; if one can judge from the hit-or-miss statements that are made, they find tests very distasteful. Does this imply that teachers in the classroom are using tests for means other than that for which they are intended? Just a short time ago I read a letter (submitted by a student to the editor of a college paper) that condemned members of the faculty for using tests as a disciplinary measure rather than for measuring achievement in subject matter.

Quite naturally, we come to the point where we must be concerned with a more practical and fairer way of handling test situations. Try to convince your students that the more frequently you check on both how well you have presented the shorthand theory and how well they understand it, the more rapid will be their progress. The "reviews" that we take in class are challenges to my teaching as much as they are measuring devices of the progress that the students have made.

**The revised edition** of the *Gregg Shorthand Simplified* has included a number of features that will be of great value to all classroom teachers in coping with the testing situation. For example, the Recall Brief Form and Phrase Charts, which appear at the end of each chapter, can be used to sample student learning throughout the Manual. In addition, there are "reading speed guides," which can be used to measure the students' progress at different intervals (page 78, for instance).

Remember, too, that the unpunctuated letters beginning on page 209 can be used to check student understanding of the pretranscription factors that have been presented. Moreover, don't overlook the "marginal reminders," which have been treated in previous discussions.

Teaching and learning shorthand can be a continuing series of enjoyable classroom sessions for both the teacher and the students, if the frightening feeling that accompanies the word "tests" can be eliminated. The shorthand teacher must take the time to convince his students that "reviews" are means by which students can determine their progress.

More important, if we teachers would change our approach, we might create a more pleasant atmosphere in the shorthand classroom for both our students and ourselves. Students can be conditioned if we teachers will permit our students to condition us also.



# CONSUMER training

RAMON P. HEIMERL COLORADO STATE COLLEGE, GREELEY, COLORADO

**How to use advertising intelligently** is a problem for consumers. Advertising does not aim primarily to help the buyer of goods and services. Millions of dollars are spent annually for advertising, but the consumer benefits very little from the expense that he helps to pay. Advertising can aid the consumer in his buying only if he learns to use advertising properly. This might be considered the objective of the unit.

The first class period can be devoted to a discussion of why the advertisements appeal to various people or what appeals are used by the advertiser. After careful selection, the teacher may bring in newspaper or magazine advertisements that illustrate the various psychological appeals used by advertisers. Special reports on advertising can be prepared by individuals and reported to the class. Topics might include the main objectives of advertising, the media used by advertising, the history of advertising, the extent of advertising today, the processing of an advertisement, the advantages of advertising, the advertising agency, and the organizations working for the improvement of advertising.

**A graphic analysis of how** an advertisement is constructed would make a good bulletin-board display; it might also be the center of a class discussion. Perhaps some pupil could find out the details and give a comprehensive report to the class. Layouts and finished products are available from newspaper offices or from advertising departments of various local retail establishments. The Curtis Publishing Company printed kits on the process behind various national advertisements; but these, unfortunately, are now out of print. Any large city newspaper will co-operate with you, however. Field trips to the advertising departments of newspapers or department stores are perhaps the best means to see the process first hand.

Collecting advertisements can form the basis for a study of useful information. Pupils should be helped in picking out useful information from the more common trade puffs. One of the greatest problems of living today is to distinguish between fact and opinion, and here is an opportunity to help young people develop this critical ability. Perhaps using colored pencils for "useful" and "useless" information may help. Students might collect advertisements on one product and make a notebook with an analysis of each type of ad. Various media of advertising should be included because each has its own degree of influence on the general consumer.

**Here are helpful materials** on the consumer use of advertising. Obtain them from the addresses given. *Learning to Use Advertising*, by the Consumer Education Division of the National Association of Secondary School Principals, 1201 Sixteenth Street, N. W., Washington 6, D. C.; *Some Questions and Answers about Advertising*, from Advertising Federation of America, 330 West 42 Street, New York 18, New York; *Fables and Facts about Advertising* (three small folders with a light, simple story of advertising), from the Commission on Advertising, United States Chamber of Commerce, Washington 6, D. C.; *Protection of the Consumer by the Federal Trade Commission*, a clear picture of the Commission's duties in regard to advertising, published by the Federal Trade Commission of Washington, D. C.

Perhaps the best source is the advertisements themselves. A good collection should be started early to assure having a sampling of all the various media during the study of this unit.

invoices, salesmen's commissions, to name a few—can be adjusted immediately to account for the change. Thus, the computer permits a return in principle to the accounting methods used in business houses long ago, when clerks on high stools adjusted all affected records each time a transaction occurred.

A profit-and-loss statement can be produced in one day rather than thirty days after the company's books are closed. Vital sales and statistical data can be provided overnight for companies doing business on a nationwide basis. Trends can be analyzed, inventories can be maintained, costs can be computed with a speed, accuracy, and depth never before thought possible. By having quicker access to much more information than is now possible, management will have more significant analytical data available. The result will be greater efficiency and integration of widespread operations.

For instance, Don G. Mitchell, chairman and president of Sylvania Electric Products, Incorporated, in an article aptly titled, "Information: What We Want, When We Want It," commenting on the installation of a Univac in his company, writes: "In addition to the primary objective of making all operating information available much more rapidly than in the past, we anticipate that Sylvania's [Data Processing] Center will result in a profit improvement on all products, since it will provide a means for obtaining much additional data on our marketing and over-all operations. The accumulation of information on such a scale has hitherto been denied us by the high costs involved."

**Mass Production.** The essence of automation is the mass production of standardized products or the mass performance and self-control of a series of highly repetitive tasks with great speed and accuracy at low cost. Automation may strengthen the competitive position of many businesses and industries by enabling them to produce not only lower-priced goods but goods that are more uniform and of better quality. Automation can be extended into most kinds of business—large, small, and medium-sized. The extent to which it can be applied economically is determined not by the size of the business but rather by the volume and nature of the individual end-products or particular com-



ponents manufactured. And the price tags on automatic machines go from above one million dollars to as low as fifteen hundred dollars.

However, the mass production of standardized products raises a host of collateral problems in the marketing area. Standardization, of necessity, involves a reduction in the variety of styles and choices and a decrease in manufacturing flexibility. General Electric presents the problem this way: "The progress of automation—like all other forms of technological progress—is dependent on the customer's willingness to permit his wants to be standardized long enough to make that progress pay for itself. Ironically enough, however, the more the customer's level of living is advanced by technology, the less he is willing to submit to the standardization that makes further advances possible. For, as technological progress makes it possible for us to satisfy our basic needs with a smaller and smaller fraction of our total income, our wants are dictated more and more by emotional, cultural, and spiritual leanings and are therefore subject to more radical, more frequent, and more unpredictable changes." It would seem, therefore, that, in the end, the real problem will be that of finding those products and services that the market will allow to remain standardized long enough—and often enough—to liquidate the cost of automated equipment. On the other hand, John Diebold points out that "By clever design, it is possible to apply many of these (long-run) techniques to the production of short runs of a product."

**Social Engineering.** From the human point of view, which, in the long run, is most important, automation simply seeks to take more of the work out of work, to reduce and or eliminate as far as possible the manual effort and human waste implicit in the performance of routine, repetitive, monotonous jobs that can be done more efficiently by machines, thus freeing people to apply themselves to the higher order of mental functions that only human beings are capable of. It is this idea that prompted Norbert Wiener to coin the phrase, "The human use of human beings." There is nothing specifically human in a manually operated conveyor belt or assembly line; nothing ennobling in boredom and drudgery.

(To be continued next month.)



## teaching aids

JANE F. WHITE GEORGIA STATE COLLEGE FOR WOMEN, MILLEDGEVILLE, GEORGIA

**For distributive education.** The American Vocational Association, Inc., 1010 Vermont Avenue, N. W., Washington 5, D. C., recently sent me a booklet, "Evaluative Criteria for Distributive Vocational Education," which outlines distributive education programs. The booklet will be useful to state supervisors trying to improve programs of instruction in distributive occupations, as well as to teacher trainers in the field of vocational education. It could well be used, too, as a reference or supplementary text for students. Only 35 cents each. When you write, request a complete list of this association's many valuable publications.

**Career advice.** New York University has an excellent bulletin, "Business as a Career," which contains discussions and photographs on every major field of business. A Business Opportunity Chart, listing specific positions available in a given field of business activity, is also included. Write to Dean of Admissions, New York University, Washington Square, New York 3, New York. Sorry, single copies *only*.

**Office machine poster.** "A Day with a Modern Cash Register" is a fine poster to be used in salesmanship and office machines classes. The poster outlines those points that are important for students to remember. The general use of the cash register is emphasized, rather than the actual operation of a particular model. A teacher's guide accompanies the poster, which is free from Clary Corporation, General Offices, San Gabriel, California.

**Sample policies.** For a kit of materials containing sample casualty insurance policies and fidelity and surety bonds, write the Association of Casualty and Surety Companies, 60 John Street, New York 37, New York. It is free to students enrolled in an advanced or special casualty and/or surety course for college credit, but obtainable *only* through the instructor. Students enrolled in other than these courses, or in courses not for college credit, may obtain a kit at the cost of production, \$1.00 each, including shipping charges. Instructors are entitled to two kits without charge, regardless of whether their courses are offered for college credit.

**Bookkeeping guide.** An excellent device for the beginning bookkeeping student is obtainable for 90 cents from the D. C. Heath Company, 285 Columbus Avenue, Boston 16, Massachusetts. Side A shows the bookkeeping formula; side B, the accounting cycle.

**Typing booklet.** "The Modern Secretary," contains the historical background of woman's rise in the secretarial field; how to care for your typewriter; transcription do's and don't's; punctuation hints; how to set up a business letter; grammar tips; telephone technique; and typing short cuts. It is free, too, in classroom quantity. Write to the Royal Typewriter Company, Inc., School Department, 2 Park Avenue, New York 16, New York.

**Office encyclopedia.** For a how-to-do-it manual for the executive and secretary, complete with hundreds of illustrations, write to Pocket Books, Inc., Rockefeller Center, New York 20, New York. The *Office Encyclopedia* will cost you 50 cents. When you write, request a list of other Pocket Book editions that pertain to business education.

**Correction:** The booklet, "Suggestions on How to Hold Effective Meetings," is available at 50 cents each—not free, as indicated here last month.



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## TWO ON THE AISLE

MARY H. ZIMMERMAN

**T**WO ON THE AISLE for tomorrow night. Yes, that's right. The name is Karen P. Case, K-A-R-E-N, middle initial! P. No, not B as in *bird*, P as in *perfect*. That's right. Last name, Case, *case* as in a lawyer's case. Got it? Fine.<sup>2</sup> Thank you. Send the tickets up to the office."

Karen P. Case put her finger on the receiver hook and held it<sup>3</sup> down while she uncoiled the telephone wire. Then she hung up the receiver. She took a soft yellow cloth and wiped some<sup>4</sup> imaginary dust from her desk top. She lined up the correspondence in her basket, one letter exactly<sup>5</sup> on top of the other, the smaller sheets on top, the larger at the bottom. Then she looked at the clock. Fifteen minutes<sup>6</sup> to one, time to comb her hair and renew her lipstick. She never made up at her desk the way the other girls<sup>7</sup> did, nor did she powder her nose in public. Emily Post would shudder at such actions.

When she returned from the<sup>8</sup> washroom, the office was still empty although it was five minutes to one, five minutes before all the girls should be<sup>9</sup> back at their desks. What untidy desks they were, too, Karen thought. Why couldn't people be orderly?

As she began<sup>10</sup> typing the morning's dictation—five minutes early—Mr. Dean, her boss, came in from an early lunch. He nodded<sup>11</sup> approvingly as he passed her desk.

Karen P. Case, Miss Karen P. Case, knew that Mr. Dean thought of her as perfect.<sup>12</sup> In fact, it was he who had coined that "P as in perfect" phrase she thought so apt that she had been using it ever<sup>13</sup> since. If she sometimes hoped he noticed that she was pretty as well as perfect, she never dwelt on it long.<sup>14</sup> Emily Post said the office was no place for romance, and Emily Post was to Karen as bread is to life.

Just<sup>15</sup> then, the buzzer sounded, and Karen hurried into Mr. Dean's office, shorthand notebook and pen in her hand.

"No<sup>16</sup> more letters, Miss Case," her boss said, "I was wondering what kind of play you think Mr. King would like?"

"Of King, John, and<sup>17</sup> King from Barnum, Iowa?"

"The same."

"The elder Mr. King or the younger Mr. King?"

"The younger."

"I'd say he<sup>18</sup> was the 'Silk Stockings' type."

"Exactly what I've been thinking. Order two tickets for 'Silk Stockings' for tomorrow night,<sup>19</sup> center aisle, not farther back than the tenth row. Have them delivered to the office by two o'clock. Jack King is dropping<sup>20</sup> around to discuss the new contract, and I want to put him in a good mood. He's still undecided about<sup>21</sup> signing with us."

"Yes, Mr. Dean. I hope I can get the tickets. This is such short notice."

"Just be sure you get them."<sup>22</sup> Mr. Dean looked grim. "I want them in the office before King gets here."

"Yes, Mr. Dean, I'll have them by two o'clock."<sup>23</sup>

Karen left the inner office and went back to her desk. It was five minutes past one and, though the girls had gradually<sup>24</sup> drifted in, no one had started work yet. She looked at her watch, at the clock, and at the girls. Six minutes after<sup>25</sup> one, seven minutes after one, eight minutes after . . . one by one the girls returned to their duties. Satisfied<sup>26</sup> that everything was under control, Karen proceeded to order the tickets for Mr. Dean.

"Have them<sup>27</sup> delivered to me by special messenger before two o'clock," she stipulated. "This is Karen P. Case, Miss Karen<sup>28</sup> P.—no, not B as in *beer*, P as in . . ."

"Poison," someone called softly.

"P as in *perfect*; Case, a lawyer's case."<sup>29</sup> Karen finished as if she had not heard the rude interjection. She put down the receiver and returned to her<sup>30</sup> typing.

She was starting on her third letter when the tickets came. Two messengers, two sets of "two on the aisle" m<sup>31</sup> the regulation envelopes. Karen checked the contents of each envelope, signed for them, and paid the messengers.<sup>32</sup> She smiled as she looked at her own tickets—gallery seats for the Philharmonic concert at Carnegie Hall. The<sup>33</sup> gallery wasn't fashionable, but it was really the only place to hear the symphony. All real<sup>34</sup> music lovers sat in the gallery, she thought smugly.

Her pleasant musings were interrupted by the sound of<sup>35</sup> loud talk from the doorway. The departing messengers had bumped into Mr. King, who was coming in. Karen's lips<sup>36</sup> tightened as she watched the three untangle themselves. As usual, Mr. King was not on time for his appointment.<sup>37</sup> Generally, he was late; today he was too early.

"Good afternoon, Mr. King," Karen said as the client<sup>38</sup> reached her desk. "I'll tell Mr. Dean you're here."

Seconds later, Mr. Dean came out beaming, greeted Mr. King effusively,<sup>39</sup> and ushered him into the inner office with a flourish. Karen sat at her desk, expecting her buzzer<sup>40</sup> to sound at any minute.

The buzzer did ring, finally, and Karen flipped up the switch. "Will you bring in the<sup>41</sup> King file, Miss Case?" Mr. Dean's voice boomed. "And is that other little matter taken care of?"

"Yes, Mr. Dean, the tickets<sup>42</sup> came."

"Bring them along while you're at it."

"Yes, Mr. Dean."

The envelopes lay side by side, identical in<sup>43</sup> appearance. Karen checked the contents again to avoid a mistake, laid one envelope on her desk blotter and was<sup>44</sup> about to put the other one in her drawer when the buzzer sounded again.

She flipped up the switch. "I'm on my<sup>45</sup> way in, Mr. Dean."

"Take that new contract out of the file before you come in," Mr. Dean sounded angry.

Karen<sup>46</sup> hurriedly took the contract out of the file, grabbed the folder and a ticket envelope, and was halfway to the<sup>47</sup> inner office when her buzzer sounded again. Ignoring it, she completed her errand. In thirty seconds,<sup>48</sup> she was back at her desk, still shivering from the frigid climate of the inner office.

Before she resumed her<sup>49</sup> typing, she picked up the second envelope of tickets to put in her purse, double-checking from force of habit.<sup>50</sup> As she stared down at the tickets, she gasped. F16 and F17, Imperial Theater, "Silk Stockings!"<sup>51</sup> No, she couldn't have done that—not Karen "P for perfect" Case! Two gallery seats for the Philharmonic for Mr.<sup>52</sup> King, All-American halfback in 1949! She paled. Well, she would go in and explain even<sup>53</sup> if

it killed her, which it probably would. P for *poison* was it, she thought miserably.

Her knees shook as she<sup>54</sup> walked over to Mr. Dean's door. She knocked and opened the door slowly without waiting for a response.

"Excuse me,<sup>55</sup> Mr. Dean," she said meekly. She held up her two tickets behind Mr. King's back.

Mr. Dean ignored her gesture.<sup>56</sup>

"We don't need you for a minute or two, Miss Case," he said. "When I do ring will you bring in that contract we were getting<sup>57</sup> ready for King, John, and King?"

"Yes, Mr. Dean," she answered as she kept waving the tickets frantically.

"Those<sup>58</sup> Philharmonic tickets were just what Mr. King wanted," Mr. Dean went on significantly. "I hope *you* enjoy<sup>59</sup> 'Silk Stockings!'" he added.

"'Silk Stockings,'" Mr. King was

murmuring. "Why does everyone get me tickets for<sup>60</sup> 'Silk Stockings?'"

"Each to his own taste, isn't that right, Jack?" Mr. Dean bubbled. "I said to Miss Case, Mr. King is the<sup>61</sup> Philharmonic type. Get him tickets for the symphony, two in the gallery where the real music lovers<sup>62</sup> go, I said. Didn't I, Miss Case?"

Before Karen had time to say, "Yes, Mr. Dean," Mr. King broke in.

"When I saw<sup>63</sup> that envelope I said to myself: Jack, here's two more tickets for 'Silk Stockings.' I bet you a seat to the Met. What's<sup>64</sup> up? Is there a bargain day on 'Silk Stockings?' Then I sneak a peek, and I'm speechless. I see two tickets to the<sup>65</sup> Philharmonic, two on the aisle, gallery, Carnegie Hall. Funny thing," Mr. King finished as Karen was closing<sup>66</sup> the door softly, "funny thing her going to 'Silk Stockings.' I'd have picked her as the Philharmonic type myself." (1339)

# Cash on Hand

RAYMOND DREYFACK

**A**LL RIGHT! If nobody moves, nobody'll get hurt."

Hearing these words, Marie shuddered. She continued to stare in<sup>1</sup> horrified fascination at the two men who had broken into the office. One was tall, pale, and shifty looking,<sup>2</sup> and had a twitching right eye. The other was short, heavy-set, bald around the temples. Both flashed snub-nosed revolvers.<sup>3</sup> The short one held old Casey, the night watchman, in front of him, the gun on his back.

It was the pale one's quick, nervous<sup>4</sup> motions that worried Marie. He looked desperate and crazy enough to press that trigger at the slightest<sup>5</sup> provocation. She had been afraid that something like this might happen. Once she had even mentioned to Mr. Sherman<sup>6</sup> that they shouldn't keep the payroll in the office after regular hours. He had agreed but had never made any<sup>7</sup> other provisions. Now it was too late.

"All right, let's have it!"

The pale one was obviously the leader. He<sup>8</sup> had addressed the remark to Mr. Sherman, not looking at Marie or at Al Simpson, the tabulating<sup>9</sup> supervisor, who was also in the room.

"I'm afraid I don't have much cash on me," Mr. Sherman said, almost<sup>10</sup> apologetically.

Two quick steps and the gunman had him by the necktie and shirt. "Look, Mister," he snapped, "if you<sup>11</sup> want to come out of this all right, don't be smart with the tricks." He released Mr. Sherman, pushing him back against the table,<sup>12</sup> where he had been going over the books with Al.

"Tomorrow's payday. I want that cash."

They knew then, Marie thought.<sup>13</sup> Half on impulse she said quickly to her boss, "They mean business, Mr. Sherman. Maybe you had better let me get<sup>14</sup> it for them."

"That's more like it," the pale one said. "Make it snappy, sister."

Marie rose as calmly as possible

from<sup>15</sup> her desk, trying to conceal her fright from the gunmen. Mr. Sherman's private office, small and compact, was just outside<sup>16</sup> the large central office that was now darkened and empty of people. His desk was near the window, directly<sup>17</sup> opposite the door.

She walked across the room towards the desk. On its top was a pen and pencil set, a telephone,<sup>18</sup> a small file, a fluorescent desk fixture, an inter-office communications system, and a stack of reports<sup>19</sup> about eight inches high. Behind her she could hear Casey's labored breathing. Faintly, from the floor below, where the<sup>20</sup> factory was working a second shift, came muffled sounds of machinery in action, lathes, grinders, drill presses.<sup>21</sup>

Marie opened the top drawer of Mr. Sherman's desk, aware of her boss's puzzled expression, and the<sup>22</sup> suspicious, close-eyed scrutiny of the two thugs.

She glanced into the drawer briefly, then opened the second one. The<sup>23</sup> pale gunman moved towards her, murder in his eyes.

"What are you giving me, sister?"

"The payroll isn't here," Marie<sup>24</sup> said in a loud, frightened voice. "The bookkeeper must have put it in the safe. I'll get it for you. I know the combination."<sup>25</sup>

"Then quit stalling and get it open." He jerked the revolver meaningfully towards the safe. "And it better<sup>26</sup> be there if you know what's good for you."

"It's there all right. The safe is equipped with a double protection device,<sup>27</sup> though. It takes ten minutes to



open it. I'll work as quickly as possible."

The pale thug motioned Marie over<sup>28</sup> to the safe. "Get going on it, and fast," he said in a low, tense voice.

She knelt down and began playing with the dial.<sup>29</sup> Six right, eighteen left, twenty-two right, three times around, and back to seventeen.

"Don't take all night!"

She was shaking<sup>30</sup> like a leaf. "Please, you'll mix me up!"

The pale thug prodded her in the back with the cold, hard steel of the gun. "I'll mix you<sup>31</sup> up all right!" he said tensely.

While Marie was manipulating the dial, she tried to keep track of the minutes,<sup>32</sup> dragging the job out as long as possible. But, after several delays, the gunman was growing impatient.<sup>33</sup> Giving the dial a final turn, Marie opened the safe. The money was in the large gray strongbox. Removing<sup>34</sup> the box, she set it down on Mr. Sherman's desk.

The pale thug went over to it, pushing her roughly aside. "Where's<sup>35</sup> the key?" he demanded.

"The key is in my desk," Marie said. "I'll get it for you."

She walked over to her own desk,<sup>36</sup> opened the drawer, removed the small steel key, and handed it to the gunman. Eyes glistening, he opened the box.<sup>37</sup> The bills were arranged neatly in stacks of twenties, tens, fives, and singles. In another compartment were rolls of coins.<sup>38</sup>

A nice haul, seventy-eight hundred dollars in all.

The two men started stuffing the bills into a large box. They<sup>39</sup> both looked elated now, and triumphant. The shrewd narrow eyes of the pale one shone with excitement and confidence.<sup>40</sup>

When all the money was gathered up, they backed slowly toward the door, still wary, guns still trained. The pale one was grinning<sup>41</sup> as if to say, "Thanks for the handout."

"Just stay where you are until we're gone," he said aloud. "And remember this,<sup>42</sup> you're getting off easy."

Without turning, the short one opened the door. One after the other the men backed carefully<sup>43</sup> out of the room.

As soon as the door closed, Mr. Sherman rushed to his desk. Just as he picked up the phone, there was<sup>44</sup> a sound at the door, and he dropped the receiver as if it were hot.

The thugs were back, but they looked different now.<sup>45</sup> They no longer carried guns, and they seemed definitely cowed by the two policemen behind them.

Mr. Sherman<sup>46</sup> and Al exchanged looks of amazement. Simultaneously, they turned to Marie, who modestly lowered her eyes.<sup>47</sup>

"We're booking them downtown," one of the policemen said, "and we'll need your testimony. We've been looking for this pair<sup>48</sup> for a long time. They're wanted for several jobs. Oh, incidentally," he gazed admiringly at Marie, "that<sup>49</sup> was pretty quick thinking, Miss."

Mr. Sherman raised a quizzical eyebrow. "Pardon my male curiosity, Marie,"<sup>50</sup> he said, "but just what does that officer mean?"

"It really wasn't anything," his secretary answered<sup>51</sup> matter-of-factly. "I was always afraid that some day we'd be held up, so I had the electrician hook up<sup>52</sup> a relay inside your desk

drawer. The intercom system could be turned on by merely flicking a switch.

So that's<sup>53</sup> why you went over to the drawer."

"Yes. You see, the whole factory knew we were being robbed."

"Ingenious." Quite<sup>54</sup> audibly, Mr. Sherman let out his breath.

"Oh, incidentally," he said, imitating the policeman's voice, "remind<sup>55</sup> me to put you in for a raise. Also, I'll have to remember to take Mrs. McNulty out to lunch."

"Who is<sup>56</sup> Mrs. McNulty?" Marie asked.

"Don't you remember? She's the woman at the employment agency who talked me<sup>57</sup> into hiring you as my private secretary."

(1119)

## THE NEW LOOK

ROLLIE HOCHSTEIN

JANE DUNN decided one morning that the time had come for self-improvement. She had arrived at her office ten minutes<sup>1</sup> early, opened her coffee container, and gazed out the window. After a period of intense thought she<sup>2</sup> had come to the conclusion that during the past few months she had done absolutely nothing constructive.

Jane took<sup>3</sup> a small white pad from her top drawer and listed her most interesting recent activities. She wrote very<sup>4</sup> slowly, because she had very little to write. Her list ran something like this:

1. Went to movies with Howard.
- 2.<sup>5</sup> Bought a fall hat.
3. Took three suits to dry cleaners.
4. Went bowling with Howard.
5. Read a magazine. Forget which<sup>6</sup> one.
6. Tried a new nail polish.
7. Baked gingerbread. Didn't rise. Sprinkled it on window sill for the birds.

That's<sup>7</sup> the way her entire list went strictly for the birds.

Glancing at her boss's daily calendar, Jane was pleased to notice<sup>8</sup> that he had an appointment with the dentist and would not be in for another hour. Good. This gave her some free<sup>9</sup>

time. She would rearrange her life; she'd become useful, vital, glamorous, exciting.

"We'll start at the bottom," Jane<sup>10</sup> announced to herself. "With me personally. How do I look?" She withdrew a large mirror from her bottom drawer<sup>11</sup> and, peering into it, decided she must change her lipstick shade, the shape of her eyebrows, and her coiffure. She jotted<sup>12</sup> down each decision.

"Next," declared our heroine, "I will lose ten pounds—more or less." She wrote on her Improvement<sup>13</sup> List: No bread, no butter, no potatoes, no desserts except fruit, no between-meal snacks. As an afterthought, she added:<sup>14</sup> Walk straight, as if suspended from the sky—rib cage up, chin straight, shoulders back.

Now, thought Jane, rubbing a pensive forehead<sup>15</sup> with her eraser, comes mental improvement. She should read more. Thinking back to high school days, not long past, she recalled<sup>16</sup> a goodly number of classic books that she had neglected. And some more that she had halfheartedly read, but<sup>17</sup> never understood.

She wrote on her pad: Read and enjoy "Pickwick Papers," "Pride and Prejudice," "Gulliver's Travels."<sup>18</sup>

"Moby Dick," and Boswell's "Life of Johnson." That should be enough for a start.

The only aspect left was improvement<sup>10</sup> in her creative life. How, thought Jane, shall I find better ways to express myself? There was a modern dance class offered<sup>20</sup> in her community. She visualized the ballet with herself as Prima Ballerina. She could almost<sup>21</sup> hear the crowds cheering.

But, no, she decided. I'd look awful in a ballet costume. Better wait until I've<sup>22</sup> finished my diet.

She considered singing. She could see herself now, center stage at the opera house, gowned in<sup>23</sup> satin, wrapped in ermine, the great diva whose high C's were the toast of the country. She hummed a strain from *Carmen*,<sup>24</sup> interrupting herself only when she remembered that she

couldn't even sing a scale in tune.

Painting? She'd smear the<sup>25</sup> colors. Sculpture? Too much clay all over her hands—she'd never get her nails clean. Writing? Never! She was at the<sup>26</sup> typewriter all day as it was. Perhaps she would be a great actress. At once, she saw herself as Juliet, raising<sup>27</sup> a pale and lovely arm in tragic farewell to that handsomest and noblest of youths, Romeo . . .

Her musings were<sup>28</sup> interrupted by the sound of an opening door. "Romeo," Jane called, overwhelmed by her role, "Romeo, my<sup>29</sup> beloved . . ."

"What!" a gruff voice exclaimed, and there in the doorway stood—not a handsome hero, but a slightly impatient<sup>30</sup> boss.

"Mr. Evans," Jane gasped. She was suddenly conscious of the unopened mail, the unprepared schedule, the<sup>31</sup>

untyped letters. "Your dentist appointment," she murmured weakly.

"Canceled," said Mr. Evans tersely and marched into<sup>32</sup> his office.

Jane stared into space for several minutes. Then, suddenly, the truth dawned. There was something constructive<sup>33</sup> she could do—right here in the office.

Instead of wasting time on fantastic dreams, she'd concentrate on becoming<sup>34</sup> a better secretary. Why, with a little effort on her part, she could become indispensable to Mr.<sup>35</sup> Evans. "Miss Dunn," she could hear him say, "I need your advice . . ." "Miss Dunn, will you write a speech for me . . ." "Miss Dunn, you'll have<sup>36</sup> to fly to Washington . . ."

Jane took a deep breath, flipped some paper into her typewriter, and started out to acquire<sup>37</sup> her "new look." (742)

**O**UT IN HOLLYWOOD, there's an attractive young lady whose boss has four legs, long eyelashes, and a blond mane! But, in<sup>1</sup> spite of being unusual, Mary Johnson's boss is just about as courteous and pleasant as a boss can<sup>2</sup> be.

Mary's boss is Trigger, the "smartest horse in the world." He can do everything but type, and his secretary<sup>3</sup> wouldn't be too surprised to find him doing that someday.

Trigger, of course, belongs to Roy Rogers, "King of the Cowboys," and has been an indispensable part of the act for many years now. As a result, Trigger is famous<sup>4</sup> all over the world. His rodeo tours (with Roy, of course) bring out hundreds of thousands of adoring youngsters<sup>5</sup>—and oldsters, too. Television shows have added many more admiring fans of all ages.

Why does a horse need<sup>7</sup> a secretary? A good question. Trigger, like any other Hollywood star, needs one because of the mountains<sup>8</sup> of fan mail he receives. Requests for photos, hoof-prints, and "nose-graphs" (Trig presses his lovely muzzle on the picture<sup>9</sup> for his signature), pleas for a lock of his mane or tail. And he gets birthday and Christmas cards, too, in addition<sup>10</sup> to stacks of letters just expressing admiration. These missives come from adults as well as children.

Somebody<sup>11</sup> has to answer this mail, and it falls to the lot of charming Mary Johnson to do so. Nor can Mary's job be<sup>12</sup> called tedious, by any means. She never knows what will turn up in those letters, and she finds them all interesting.<sup>13</sup>

As a boss, Trigger is always soft-spoken and polite. He's gentle and nice to be around, and he never<sup>14</sup> expects special treatment just because

## FOUR-LEGGED BOSS

DUANE VALENTY

he's a famous star. Those who work with him can testify he hasn't an ounce<sup>15</sup> of ego.

Since he started in movies many years ago, this horse-with-a-secretary has acquired an<sup>16</sup> impressive bagful of one hundred tricks, each with a different cue. Most of these he learned from his master, Roy Rogers.<sup>17</sup>

"He's the smartest horse I've ever seen," Roy says. "He almost knows when you are talking about him. I have had people<sup>18</sup> ask me if Trigger ever talked back to me. That's because he does all his tricks as simply as a trained acrobat."<sup>19</sup>

Mary agrees. She has seen Trigger scan his mail with fully as much interest and intelligence as a lot<sup>20</sup> of humans. Often he'll neigh something or other that Mary will interpret and put in her answering letters.<sup>21</sup> Sometimes, as he reads, a contented "horse-smile" appears on his handsome countenance.

Few bosses weigh in at<sup>22</sup> eleven hundred pounds, and Mary has to agree that Trigger is a lot of horse. She's glad that he never chooses to<sup>23</sup> throw his weight around. This boss never chews on a big black cigar, either, although occasionally he'll nurse along<sup>24</sup> a wisp of straw at the corner of his mouth.

Mary doesn't mind. And her boss never flies off the handle.

It's<sup>25</sup> fun to have a boss who can do tricks. Trigger paws the ground when asked how old he is (and answers correctly), says his<sup>26</sup> prayers, does the camel stretch—and a host of other difficult feats.

Few bosses can boast of being harder workers<sup>27</sup> than this one. In countless movies, Trigger has borne his beloved rider up the trails to glory, pursued and<sup>28</sup> eluded numerous villains, and foiled many a desperate fate. When he's on the road, this super-hoss-boss has<sup>29</sup> his own de luxe, air-conditioned trailer. And his bejeweled show-saddles always cause a sensation.

Mary will<sup>30</sup> point with pride to the good work her boss does. On each rodeo tour, Roy and his horse take time to visit the children's<sup>31</sup> hospitals. Trigger is a tremendous favorite. Gently he'll push a wheel chair or muzzle a little patient's<sup>32</sup> pillow. The kids just love it.

There was a time when Mary Johnson wondered whether she was going to lose her job,<sup>33</sup> or her boss, or both. It happened in Texas about a year ago.

A rich cattleman had his eye on Trigger,<sup>34</sup> the wonder horse. One day he and Roy Rogers were seen in close conversation. And word sped around that Roy had been<sup>35</sup> offered \$100,000 for his beautiful palomino.

"Trigger belongs to all the kids of<sup>36</sup> America," Roy told the cattleman, as he declined the fabulous offer. "They made stars of both of us."

As proof<sup>37</sup> that he meant what he said, Roy offered to issue a Trigger Ownership Certificate to any youngster who<sup>38</sup> would write in for one. These certificates declare the holder's part-interest in the big horse. It is part

of Mary<sup>1</sup> Johnson's work to send them out, and she doesn't mind that it's turning into a full-time chore in itself.

After<sup>10</sup> all, how many girls have a boss so lovable that everybody wants a part of him? (816)

## FLASH READING\*

# The Doctor Who Became a Writer

ELSIE LEFFINGWELL

**E**ARLY IN LIFE, the normal man makes a choice of careers. There are all types of jobs he can tackle, but he decides<sup>1</sup> on his career and learns to be really good at that job.

An exceptional man, with the resources to fill<sup>2</sup> two jobs well, is A. J. Cronin. He has had two careers.

For years he was a physician. He was able to<sup>3</sup> operate at the hospital, and he helped people get well. He liked his job because he was good at it.

He met a<sup>4</sup> charming girl by the name of Mary, and she agreed to marry him.

Cronin was a physician for some years, and<sup>5</sup> then he became ill. He was cautioned that it was essential that he take a vacation. He had not had a real<sup>6</sup> holiday for years. He and his family—Mary and their two boys—left for a farm.

Dr. Cronin could not<sup>7</sup> bear being idle. He decided to try to write. He had no knowledge of writing style, but he had a good deal<sup>8</sup> to say. So he put his thoughts on paper.

For three months he stayed at it. He would not take even a day off, but wrote<sup>9</sup> all day and often in the evening, as well.

The day came when he read his story and felt that it was lacking. He<sup>10</sup> disliked it and decided to destroy it. He was discouraged. Finally, he reversed his decision and began<sup>11</sup> writing again.

When he was finished, he packed his script securely in a parcel and dispatched it to a man<sup>12</sup> he thought might buy it. Then he really began his vacation.

Days passed. Then, to his delight, he received notice<sup>13</sup> that his novel was exceptionally good—that he would be paid well for it.

People liked the story that he had<sup>14</sup> thought a failure and bought copies of it. Fame made Dr. Cronin stop and take stock of his life. He thought of the life<sup>15</sup> of an author, of people reading the messages he could write in his novels. He changed his career and

began<sup>16</sup> to earn his living as a writer.

If you desire, you can buy a story of his or get it at the library.<sup>17</sup> People read his novels because they are happy to share the thoughts of a fine writer like A. J. Cronin. (360)

\*Vocabulary limited to Chapters One and Two of *Greig Shorthand Simplified*

## OGA MEMBERSHIP TEST The Will and Its Action

There has been altogether too much talk about the secret of success. Success has no secret. Her voice is ringing<sup>1</sup> through the market place and crying in the wilderness, and the burden of her cry is in one word—will. Any<sup>2</sup> man who hears and heeds that cry is fully equipped to climb to the very heights of life.

If there is one thing that I<sup>3</sup> have tried to do through these years, it is to indent in the minds of the men in America the living fact that<sup>4</sup> when they give WILL the reins and say "Drive on", they are headed toward success. —Dr. R. H. Conwell (96)

## JUNIOR OGA TEST The Ingenuity of Aesop

A Merchant, who was at one time Aesop's master, ordered preparations to be made for an intended journey.<sup>1</sup> When the burdens were being divided among the Servants, Aesop asked if he might have the lightest. He was told<sup>2</sup> to choose for himself, and he took up the basket of bread. The other Servants laughed, for that was the heaviest of<sup>3</sup> all.

When dinnertime came, Aesop, who had with some difficulty carried his load, was told to distribute an equal<sup>4</sup> share of bread all around. This lightened his burden one-half; and, when suppertime arrived, he got rid of the rest.<sup>5</sup> For the rest of the journey he had nothing but the basket to carry, and the other Servants, whose loads seemed to<sup>6</sup> get heavier at every step could not but applaud his ingenuity.

(Ingenuity lightens labor.) (140)

—Adapted from *Aesop's Fables*

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## ENCOURAGE FREE TIME JOBS

(Continued from page 18)

The teacher might ask the class members what specific jobs could be done by the students to help run the class. As each student offers a suggestion, it might be listed on the board. The list will be a long one:

- Change the wall calendar at the end of the month.
- Change the teacher's desk calendar daily.
- List needed machine repairs on the wall chart provided.
- Clean machines, change ribbons, dust desk, demonstration stand, file drawers, etc.
- Keep up-to-date bulletin-board displays of work done, topics of interest, and announcements.
- Erase the board when material is no longer to be used.
- Pass out or collect papers, supplies, books.
- Pick up papers, mend books, keep machines covered.
- Check attendance, homework, and many of the daily lessons.
- Keep teacher's desk and their own in order—pencils sharpened, pens filled.

- Straighten and clean out files periodically. Replace worn-out folders; set up new ones.
- Adjust blinds, windows, temperature according to school policy.
- Orient new students (transferees). Explain the work being done; show where supplies are.
- Help to plan the lessons and to know course objectives.
- Proofread and grade certain assignments.

### Point Up Similarities

Discuss with your students the similarity between the classroom work and office work. For example, at school a student might help orient a new student; on the job, an employee might be asked to orient a newly-hired worker.

Expect your students to do these jobs—do not assign them. Let students know that it will be really appreciated if the board is erased, the files stay straightened, and so forth. Inform them that the scissors, screw-driver, cellophane tape, and other equipment is for them to use.

Expecting students to exercise initiative when they have free time and to take responsibility for all the work that must be done will develop good workers—for both school and office.

## REDUCING TYPING ERRORS

(Continued from page 25)

pulses cross over to the other side; then, finger movements that should be made by the muscles of one side are made by muscles of the other side. The patterns of motor impulses for identical movements of corresponding fingers of the two hands are substantially identical.

Learning exercises for preventing or reducing transposition errors should be such as to: (1) develop habits of looking carefully at each letter as it is typed; (2) equalize the speed of visual response to visual impulses so all fingers use the eye-finger route; (3) strengthen the eye-finger reflexes for each set of corresponding fingers.

The eye-finger reflex for a letter is strengthened by typing that letter in sequence with each of the other letters most frequently substituted for it. As the *e* and *i* are most frequently transposed, learning exercises containing the *ie* and *ei* sequences should be used. Only one of these sequences should be presented at a time in copy containing all the common *ie* words appearing in order of length and difficulty of recognition, as in sentences like: *The wire ties on the upper tier of the new pier were weak said the man with the sad mien who used cord in lieu of wire.*

Only after satisfactory speed and accuracy have been reached on the *ie* words should similarly constructed copy containing *ei* sequences be used in sentences like: *The heir to the vein of gold laid a veil on the rein of his horse.* Finally, for review and testing, copy with a mixture of the two sequences should be used and occasionally retyped.

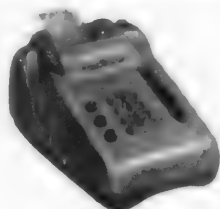
### Reducing Other Transpositions

Similar copy containing sequences of the pairs of letters most frequently transposed—*y-t*, *k-d*, *h-g*, *u-r*, *j-f*, and *l-s*—should be assigned for learning. When only a few words with immediate sequences of the transposed letter can be found, then words with other letters between the transposed letter will have to be used, e. g.: *yet* and *toy* for *y-t*, *kid* and *dike* for *k-d*, *hog* and *gush* for *g-h*, *Sal* and *lass* for *l-s*. Intelligent teaching of typewriting requires finding the causes for low speed and errors, then constructing learning exercises to prevent or remedy discoverable failures in learning and, or teaching.

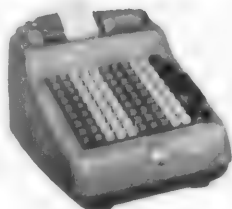
(This concludes the Barnhart series)



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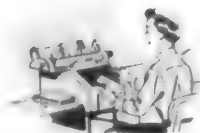
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# Professional

## Report

### NEWS SPOTLIGHT

#### Ford Foundation Grants \$210 Million

...to raise salaries of teachers in 615 four-year liberal arts and science colleges. All regionally accredited private colleges and universities received a grant approximating their 1954-55 payroll for instructors in liberal arts and the sciences. Each grant was put on an endowment basis for the first ten years, during which time only its income could be used and that only for salary purposes. After ten years, both principal and income may be used for any reason. In addition, 126 schools, who "led the way in their region" in improving faculty salaries, split up \$50 million that the Foundation had appropriated from its assets in March, 1955. This "accomplishment grant" may be used for salaries or for any other academic need.

#### Du Pont Gives Nearly Million Dollars

...to improve teaching in 100 colleges and universities. The aid, which is for the next academic year, is part of an annual program of the Du Pont Company, Wilmington, Delaware. The fund for aid to teaching totals \$445,000. In large part, the grants are intended to advance the teaching of science and mathematics. Other aid is given for research, assistantships, and fellowships.

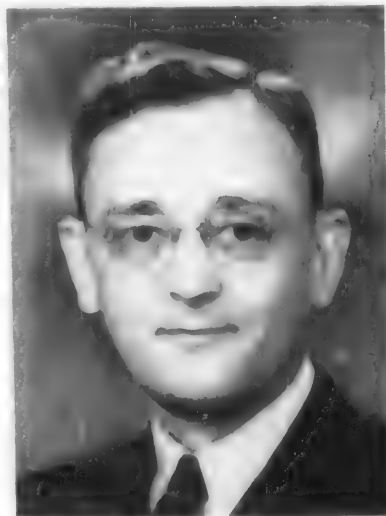
#### NBTA Elects New Officers and Board at Cincinnati



**Leslie J. Whale** (seated, right), supervisor of business education in Detroit, Michigan, is now NBTA president. Other members elected were (seated) R. L. Thistethwaite, and Doris Crank, board members. Standing are (l. to r.) Russell J. Hosler, 1955 president and board member; Milo Kirkpatrick, board member; Robert P. Bell, treasurer; Mary Plunkett, second vice-president; A. Donald Beattie, first vice-president; and Carl H. Cummings, secretary.

#### PEOPLE

• D. D. Lessenberry, professor of education at the University of Pittsburgh, received the 1955 John Robert Gregg Award in Business Education at the annual banquet of the National Business Teachers Association, held in Cincinnati, December 30, 1955. The



**D. D. LESSENBERRY**

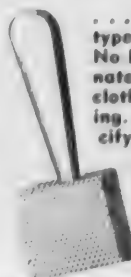
... the award served at the banquet

award includes a citation for the recipient's contributions to business education and a cash gift of \$500, both provided by the Gregg Publishing Division, McGraw-Hill Book Company, Inc., New York City.

In conferring this year's honor on Dr. Lessenberry, Helen Reynolds, of New York University, the chairman of the Administrative Committee for the Award, read a citation that follows in part: "To David Daniel Lessenberry—For his notable contributions as an educational philosopher, as a dynamic and magnetic teacher, and as an inspiring speaker; for his enduring and effective efforts toward the improvement, expansion, and enrichment of business education; for his resourceful pioneering in . . . business-teacher training. . . ."

Lessenberry is perhaps best known for his contributions to typewriting in-

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struction. He is a past-president of NBTA, EBTA, Tri-State, BEA, and Delta Pi Epsilon. From 1930 to 1955 Lessenberry was director of courses in business education and professor of education at the University of Pittsburgh. He is still on the faculty of the University's School of Education.

Heading the Board of Selection for the 1955 Gregg Award was Russell J. Hosler, University of Wisconsin.

• E. C. McGill, UBEA president, has been selected "Man of the Week" by the *Emporia (Kansas) Daily Gazette*. He was cited for his distinguished service as head of the business and business education department at Emporia State Teachers College. His department is reported to turn out annually more business teachers than any other Kansas college.

• D. L. Carmichael, Michigan State University, won the annual Delta Pi Epsilon Research Award for his Ph.D. study, "Teacher-Pupil Planning in Business Education." The award was presented at the fraternity's banquet held during the NBTA meeting in Cincinnati.

Second place went to Bonnie Lockwood, Southern Illinois University, for



**C. L. CARMICHAEL**

... award-winning thesis

her thesis, "A Study of the Characteristics and Duties of Certified Professional Secretaries. Honorable mention went to Hazel Flood, and William Selden.

• Agnes Lebeda, assistant professor in the Department of Business Education, Iowa State Teachers College, Cedar Falls, was awarded the Doctor of Philosophy degree by the University of Minnesota. Immediately prior to her appointment at Iowa State Teachers in 1953, she was assistant professor of economics and





**New officers** of the Southern BEA were chosen in November of last year at the association's annual meeting in St. Petersburg, Florida. Standing are (left to right): treasurer, Vernon Anderson, of Murray (Kentucky) State College; second vice-president, Theodore Woodward, of George Peabody College for Teachers; president, Gladys Johnson, of Little Rock, Arkansas; first vice-president, Harry Huffman, of Virginia Tech, Blacksburg; and past-president, Vernon A. Musselman, of the University of Kentucky. Seated are (l. to r.): regional membership chairman, Lois Frazier, of Meredith College, Raleigh, North Carolina; editor, Marie Louise Franques, of Southwest Louisiana Institute; and secretary, Lucy Robinson, of Milledgeville, Georgia.

business administration at Washburn Municipal University, Topeka, Kansas. She has published several articles.

- Milton S. Briggs has been elected assistant superintendent of schools in charge of secondary education at New Bedford, Massachusetts. A former bookkeeping editor for *BUSINESS EDUCATION WORLD* and author of *South Western's arithmetic pad*, Briggs was serving this fall as acting principal of New Bedford High School.

Briggs has taught in New Bedford public schools for the past 24 years. He has been assistant principal of the high school in charge of the business education department for the past six years. He holds a Ph.D. from Brown University, Providence, Rhode Island.

- Jacquelin A. MacNaughton has been named an assistant professor of business education at Hunter College, New York. She was an instructor.

- Forrest E. Barr, of Grand Rapids, Michigan, was the first member to register at the NBTA's annual conven-

tion in Cincinnati. He is chairman of the business department at Union High School, Grand Rapids. Mr. Barr was also the first member to register at the 1953 convention in St. Louis.

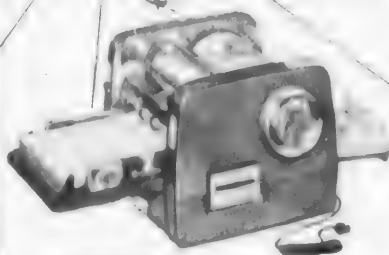
## GROUPS

- The National Association and Council of Business Schools has elected I. W. Stevens, Salt Lake City, as its president for 1956. The group's annual convention was held at Chicago in November.

Other officers chosen were: vice-president, Charles E. Palmer, Charleston, South Carolina; secretary, A. Raymond Jackson, Wilmington, Delaware; and treasurer, Hugh T. Barnes, Denver, Colorado. Members of the board of directors are: Richard D. Pickett, Charles W. Churchman, David D. Edmondson, Robert W. Sneden, Walter Kamprath, C. I. Blackwood, John

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The 1956 convention was tentatively scheduled for November 7-11 in San Francisco.

The 1955 convention was followed by a meeting of the Accrediting Commission for Business Schools. New members elected were: C. H. Hudson, Bangor, Maine; H. O. Balls, Nashville, Tennessee; Bruce F. Gates, Waterloo, Iowa; and Claude E. Yates, San Francisco.

- The American Personnel and Guidance Association will hold its annual convention in Washington, D.C., March 25-29. The keynote speaker will be Harold R. W. Benjamin, chairman of the Division of

Social Foundations of Education, George Peabody College for Teachers, Nashville, Tennessee.

- The Catholic Business Education Association's national convention will be held at St. Louis, Missouri, on April 4 and 5. Theme of the convention will be "Women in Industry." Headquarters will be at the Statler Hotel.

The Midwest unit of CBEA will host the convention. Unit chairman, Sister M. Therese, O.S.F., Aurora, Illinois, will be the general convention chairman.

- The Alabama Business Education Association held its annual con-

ference at the University of Alabama, at Tuscaloosa, in October. Featured speakers were Daniel H. Kruger and Robert Van Voorhis, both of the University of Alabama. Program chairmen were Mrs. Nellie Ward and Martha C. Smith.

- The Catholic BEA, Central Unit, held its fourth regional convention at Cincinnati in November. Featured speaker was Vernon Musselman, of the University of Kentucky. He spoke on the convention theme, "Utilizing Community Resources."

- The Southwestern Private Commercial Schools Association held its annual meeting at New Orleans in November. The new officers elected were: president, Bish Mathis, Pass Christian, Mississippi; vice-president, Roy Blackwood, Oklahoma City; secretary-treasurer, H. J. Warr, Amarillo, Texas; and board members, C. M. Witherington, Carl W. Durham, M. H. Wiley, and D. L. Sanders.

Officers for the business-teacher section are: president, Mrs. Bernice Harrigan, Houston, Texas; vice-president, Mary L. King, Wichita Falls, Texas; and secretary, Mrs. Maxine Matthews, Houston.

- The Western Business Education Conference will emphasize business education as a leader of industry at its Seattle (Washington) convention, March 29-31. The main speaker will be Arthur Olmer, director of training, Boeing Airplane Company. Other speakers include Fred Winger, Ann Brewington, Samuel Wanous, and Gene Kosy.

- The Louisiana Business Education Association has elected its roster of officers for the current year. They are: president, Ruth Bruner, Northwestern Louisiana College; treasurer, Polly Lou Hicks; and four regional vice-presidents, E. M. Wooten (Monroe), Oneil G. Decoteau (Southeastern Louisiana College), Mrs. F. J. Nugent (Lafayette), and Jennie Wilkie (Alexandria). The secretary will be appointed later.

- The Tenth Biennial National Council meeting of Delta Pi Epsilon was attended by 50 persons in November. Herbert Tonne presided over the session, which was held at Spencer, Indiana. Topics discussed included the casebook project, business education index, new admission policies, revision of the constitution, and research summaries.

Entries for the Sixteenth Annual Research Award (1955 studies) should be sent before March 15 to

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### Other reprints available:

"Typewriting Classroom Management" (February, March, April, and May, 1955) and "How Old Are Your Typewriters?" (September, 1954), by Alan C. Lloyd. 16 pages. Price: 35 cents a copy.

"General Business: Student Projects that Will Intensify Learnings," by Alan C. Lloyd; March, April, June, and September, 1954. 8 pages. Price: 25 cents a copy.

"The Use of Dramatics to Recruit More Business Majors," by Helen H. Green; January, 1953. Price: 10 cents a copy.

"Is Teaching a Profession?" by J. Milnor Dorey; November, 1954. Price: 10 cents a copy.

"Mimeograph Duplication—A Scale for Rating Performance," by Abraham Kroll; June, 1953. Price: 10 cents a copy.

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Dr. John L. Rowe, College of Education, University of North Dakota, Grand Forks, North Dakota.

• The California BEA has announced its 1956 convention for March 25-27 at the Sheraton-Palace Hotel, San Francisco. This year's theme will be "Human Relations and Business Education." Program chairmen are Jerry Cresci, Everett Silvia, and Charles Ohman, all of the City College of San Francisco.

• **Correction:** The Tri-State BEA has elected Catherine Casillo, New Kensington, Pennsylvania, second vice-president for 1955-56. This substitution should be made for the listing that appears in the January issue of BEW.

## SCHOOLS

• Columbia University is offering working scholarships for graduate students who wish to earn while they learn in the business education department of the Teachers College. The scholarships require 35 hours of work each week in the offices of administrators or professors. They are worth approximately \$2,900 a year, based on a twelve-month period of service. Free tuition is included for as much as sixteen semester hours of work during the academic year.

Most of the positions involve secretarial work and require from average to superior skills. A few positions exist in selling and accounting. Persons interested should write to Mary Ellen Oliverio, Teachers College, Columbia University, New York 27, New York.

• Wayne University's College of Education will again give credit for a European Study Tour in Comparative Education. Conducted by William Reitz, the tour will leave Detroit on June 19 and return September 2. Eight hours of graduate or undergraduate credits may be earned.

Further details may be obtained by writing to Professor Reitz, College of Education, Wayne University, Detroit, Michigan.

• The Ministry of Education of Ethiopia has openings in the government Commercial School located in the capital, Addis Ababa. The positions are in business English, business training, accounting, shorthand, and typewriting.

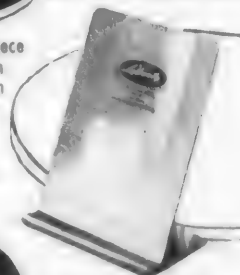
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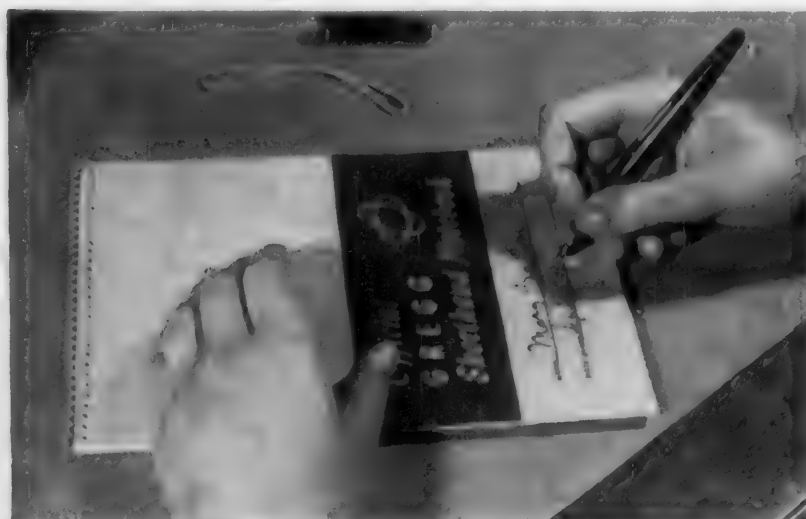
living quarters and transportation are provided. An annual leave of six weeks with pay is given, as well as eligibility for four weeks of sick leave with pay. The school year extends from about September 20 to about July 20. Teaching duties require about 25 periods a week, plus two hours of additional duties. Wives of appointed teachers may qualify as high school teachers at an annual salary of \$3,000, less as elementary teachers.

Interested applicants should write to W. Naguib, P.O. Box 1686, Addis Ababa, Ethiopia.

• Six graduate assistantships for

1955-56 have been announced by the business and business education department at Kansas State Teachers College, Emporia.

Nona Berghaus is teaching elementary typewriting at the college. Harold Cannon is an instructor in Accounting I and Business Calculations. Mrs. Nellie J. Mitchell is doing secretarial work in the department. Harold Bedner teaches courses in Business Calculations and Calculating Machines. Maurice E. Guy is an instructor in Accounting I and II. V. S. Kirkendall is teaching Salesmanship.



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**GENERAL**

• A minimum annual salary of \$4,000 for beginning teachers in public schools has been advocated by the New York State Association of Secondary School Principals. A resolution approved at the closing session of its three-day, seventy-first annual conference also called on the 1956 New York State legislature to provide \$9,000 a year for fully qualified teachers after ten years' service. "Present salary scales," the association said, "are failing to attract sufficient numbers of able teachers into the classrooms."

• A program of financial contributions to higher education has been announced by the Manufacturers Trust Company, New York City. Commencing in 1956, the company will match employee contributions to the college or university from which they received their degree, up to an annual limit of \$1,000 for each eligible employee. Funds will be unrestricted as to use.

• "Integrated Controls Over Business Records," a 79-page booklet of talks by management executives from industry and government, has been published by New York University's Graduate School of Business Administration. The booklet is a record of the second annual Conference on Records Management conducted September 19 and 20 of last year.

Among topics discussed are: electronic applications to paper-work problems, human factors in records control, new developments in records management, and audio-visual aids in records management. Copies of the booklet may be obtained for \$2 each from Harold W. MacDowell, Graduate School of Business Administration, New York University, Room 610, 115 Broadway, New York 6, New York.



# THE NATIONAL BUSINESS SHOW

## through the camera eye

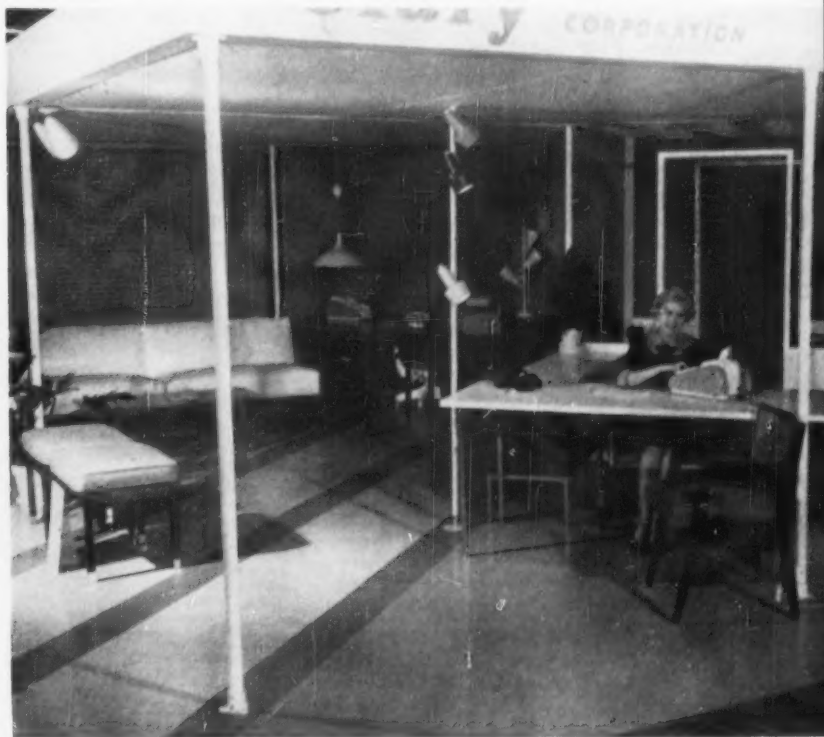


**Dictating competition** at last fall's National Business Show was held by The Gray Manufacturing Company, New York. Here Rose Maiola, a Gray secretary, watches visitor recording a sample of his dictation. Best of 549 entrants was Bernard Devaney (inset, lower right), of Revlon Products Company. Three experienced secretaries judged the standard paragraph that was dictated by all competitors. A surprising 63 per cent of the contestants were judged as "poor" dictators.



**"Magic Word"** booth in display of Royal McBee Corporation, New York, was one of busiest spots at show. Above, a visitor types words of his own choice in closed booth. Magic Word was written on outside of booth after he entered. In this case he failed to type the correct word "Fillmore."

**A color-keyed "dream" office** was exhibited at Business Show by Clary Corporation, San Gabriel, California. Turquoise blue stripes in floor repeat color of blinds and walls, with twin white sofas and walnut desks completing decor borrowed from home decorating ideas. Changing color of the flooring in any area divides office into two parts without the use of walls or partitions.



## New Business Equipment

### Four Features on Duplicator

Positive margin adjustment and a three-digit reset counter are the main features of the low-cost Ditto D-10 Direct Process duplicator. The machine also features a nickel-plated fluid tank and a slotted drum for magnetic blackout work. The price of the D-10 remains at \$195.

This hand-operated duplicator (automatic paper feed) produces up to 120 copies a minute in as many as five colors at the same time. For more information, write: Ditto, Inc., 2243 West Harrison Street, Chicago 12.

### Three Products for the Office

Three aerosol products will improve the efficiency of an office. Spra-Clean is a pressurized solvent cleaner for the type on all manual office equipment. It eliminates messy brushes, rags, and chemicals. Du-Clean, a non-irritating hand cleaner, removes ink, grime, and grease stains. Static-Ban is a spray that eliminates the dangerous and annoying effects of static electricity.

For further information, write to Panama-Beaver, 2633 Touhy Avenue, Chicago 45.

### Machines in Pastel Shades

Clary Corporation has announced a series of colored adding machines in both its 10-key and full-keyboard models. Five pastel colors are available: blue, gray, green, beige, and turquoise. A contrasting center panel, keyboard, and keys establish a center of interest for the operator.

Dealers are reportedly able to convert older models to colored covers at a low cost. Write to: Clary Corporation, Department C-115, San Gabriel, California.

### Cuts an Electronic Stencil

Electro-Rex, an electronic stencil-cutter, transfers all graphic material to a special plastic stencil used in mimeograph machines. This means that headlines, type, drawings, and even screened photographs can all be duplicated in a manner similar to the way regular stencils are run.

The original is mounted on the right side of the machine with a blank Electro-Rex stencil on the left. The machine then transfers all copy to the stencil electronically, with a definition of from 125 to 750 lines per inch, as desired.

For detailed information, contact

the Bohn Duplicator Corporation, 444 Fourth Avenue, New York City. Also inquire about their stencil-cutting service—in which copy submitted is transferred to an Electro-Rex stencil for \$3.50, plus postage. (Photo below)



### Sound, Film in One Package

A new package for projecting sound slides and filmstrips is now available for business and school use. A Bell & Howell TDC Schoolmate projector has been combined with a DuKane Recordmaster transcription player in a sturdy gray leatherette case. The new package is claimed to be the lowest priced on the market. It is available from dealers of Bell & Howell Company, Chicago, at \$149.50 for a 500-watt projector and at \$134.75 for a 300-watt.

### Adjustable Table Costs Less

An economy-priced Adjustable Typewriter Table, No. 105, has been introduced by Desks of America, Inc., Bridgeport 6, Connecticut. The new table is manufactured in accordance with specifications prepared by the Board of Education, Government of



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University of Southern California	42

the District of Columbia, Washington, D. C. The table measures 18 by 34 inches, and the typewriter platform is adjustable from 26 to 30 inches. The manufacturer claims the table costs 40 per cent less than similar tables currently on the market.

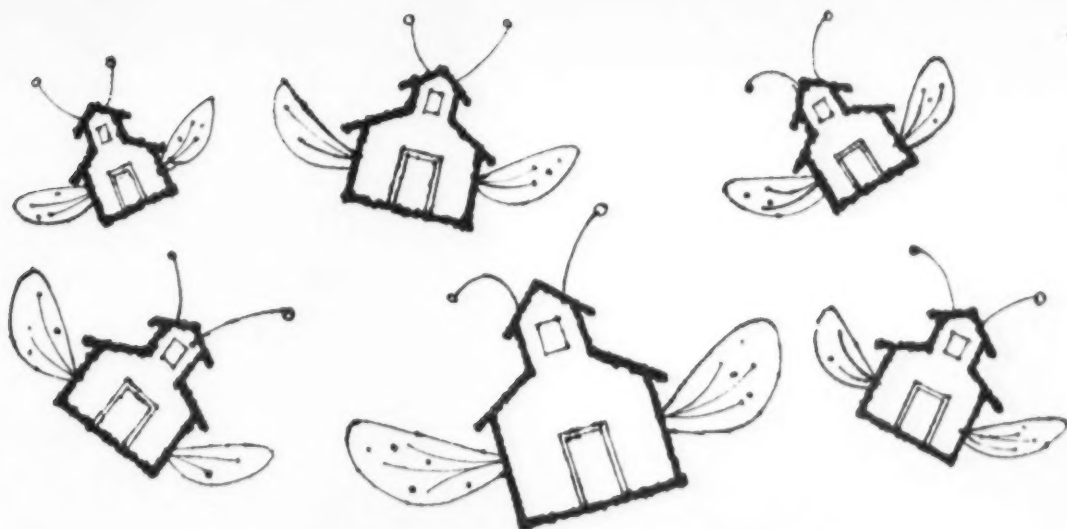
### New Products at a Glance

- The Book Master claims to be the only book holder with a snap-action, hold-down arm to keep pages secure. It weighs one-half pound and lists at \$1.29. Contact Speed-Spacer Company, 321 Greenwich Street, New York City.

- Michael Lith, Inc., 145 West 45 Street, New York 36, is distributing a new catalogue, "Advanced Techniques in Offset, Duplicating Plates, and Supplies," to organizations with Multilith and Davidson duplicating machines.

- A redesigned screen for color and stereo projection has been announced by the Radiant Manufacturing Corporation, Chicago. The "Color-master" is available in four sizes, ranging from 30 by 40 to 50 by 50 inches.

- Steel storage cabinets have been introduced by the Standard Pressed Steel Company, Jenkintown, Pennsylvania. Four adjustable shelves are usually furnished for the 6½-foot cabinet, but as many as 16 may be installed at four-inch intervals.



## Why have so many schools such a heavy date with Royal Typewriters?

**The popularity of Royal Typewriters in schools reminds you of bees around a honey pot.**

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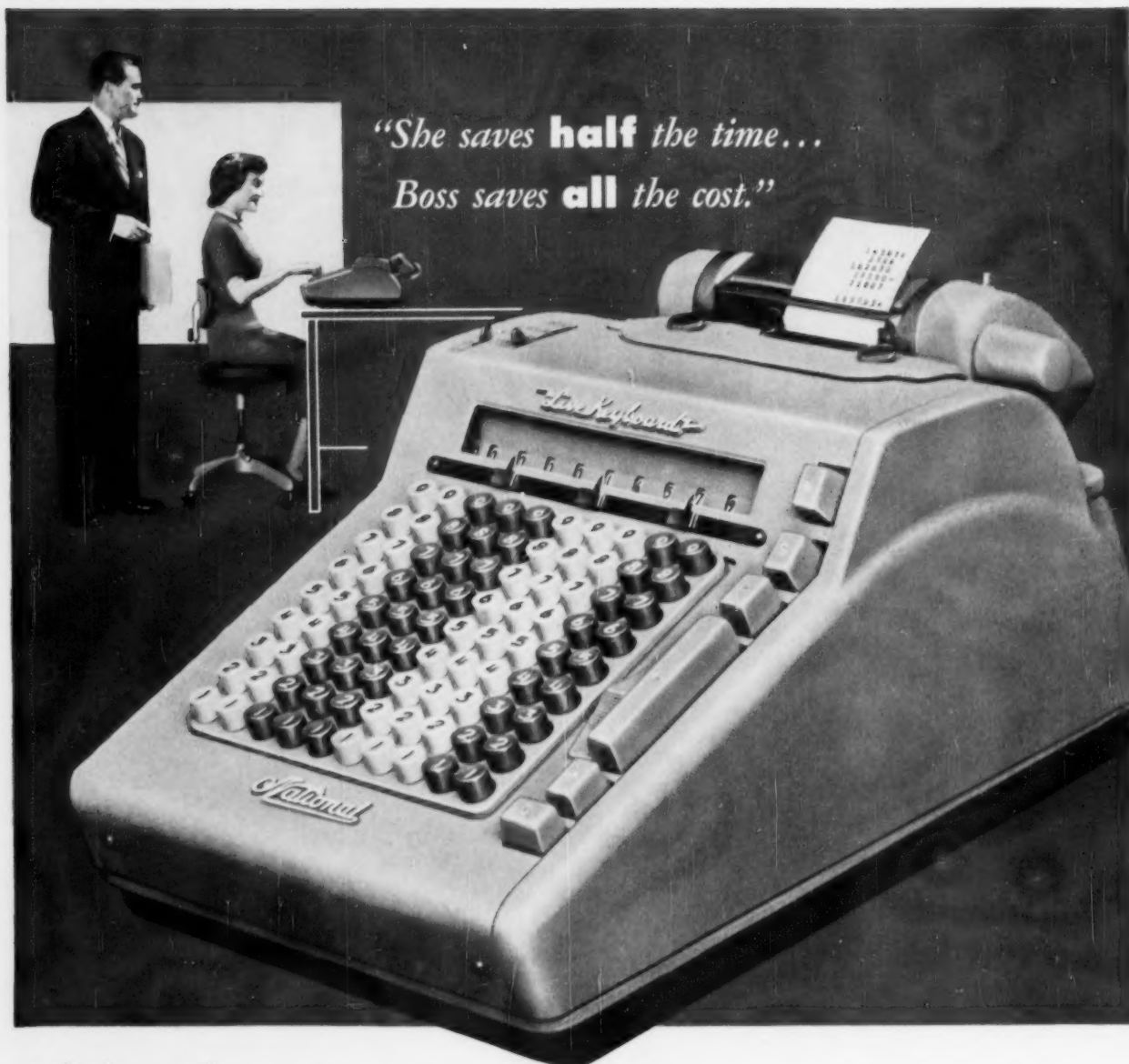
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